

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

HUAWEI TECHNOLOGIES, CO, LTD, et
al.,

Plaintiffs,

v.

SAMSUNG ELECTRONICS CO, LTD., et
al.,

Defendants.

Case No. [3:16-cv-02787-WHO](#)

**ORDER ON MOTIONS FOR
SUMMARY JUDGMENT, DAUBERT
MOTIONS, MOTIONS TO STRIKE
AND EXCLUDE - REDACTED**

Re: Dkt. Nos. 328, 329, 330, 335, 336, 337

INTRODUCTION

Plaintiffs Huawei Technologies Co., Ltd., Huawei Device USA, Inc. and Huawei Technologies USA, Inc. (collectively, “Huawei”) and defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Research America, Inc. (collectively, “Samsung”) are major players in the world of wireless telecommunications—a world governed by cellular technology standards, such as the 3G UMTS and 4G LTE standards developed by the Third Generation Partnership Project (“3GPP”) and promulgated by standard setting organizations like the European Telecommunications Standards Institute (“ETSI”).¹ Both Huawei and Samsung have agreed to license their declared standard essential patents (“SEPs”) on fair, reasonable, and non-discriminatory (“FRAND”) terms and conditions under ETSI’s Intellectual Property Rights

¹ Standard Setting Organizations “establish technical specifications to ensure that products from different manufacturers are compatible with each other.” *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 875 (9th Cir. 2012)(“Microsoft II”)(citing Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 Calif. L.Rev. 1889 (2002)). Many courts have expounded on the benefits of standards in various industries. *See, e.g., Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1030 (9th Cir. 2015)(“Microsoft IV”); *Apple, Inc. v. Motorola Mobility, Inc.*, 2011 WL 7324582, at *1 (W.D. Wis. June 7, 2011).

(“IPR”) Policy. Compl. ¶ 63 (Dkt. No. 1[redacted], Dkt. No. 3-4[under seal]); *see also* Samsung’s Answer and Am. Counterclaims ¶¶ 29, 54 (Dkt. No. 91[redacted]; Dkt. No. 90-2[under seal]). But they have been unable to agree on the terms of a cross-license to their patent portfolios or on a process that would result in a global resolution of these issues. Instead, they have chosen combat in piecemeal litigation around the globe.

This case is one of the pieces. My order here addresses each party’s motion for summary judgment concerning the patents at issue, Huawei’s *Daubert* motion and motion to preclude Samsung’s FRAND experts, and Samsung’s two motions to strike or exclude Huawei’s expert reports. Because the parties are intimately familiar with the background in this case, I will only repeat what is necessary to resolve the issues presented by these motions.

PROCEDURAL HISTORY

On May 24, 2016, Huawei filed this action asserting claims for breach of contract, declaratory judgment of FRAND terms and conditions for a cross-license, and patent infringement of U.S. Patent No. 8,369,278, U.S. Patent No. 8,416,892, U.S. Patent No. 8,483,166, U.S. Patent No. 8,812,848, U.S. Patent No. 8,644,239, U.S. Patent No. 8,885,587, U.S. Patent No. 8,885,583, U.S. Patent No. 8,639,246, U.S. Patent No. 8,412,197, U.S. Patent No. 8,996,003, U.S. Patent No. 8,724,613. Compl. (Dkt. No. 1[redacted], Dkt. No. 59[unredacted]).

Samsung answered on August 22, 2016, and amended on October 16, 2016, asserting counterclaims for breach of contract, antitrust monopolization in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2, patent infringement of United States Patent Nos. 8,228,827 (“the ’827 patent”), 8,315,195 (“the ’195 patent”), RE44,105 (“the RE’105 patent”), 8,457,588 (“the ’588 patent”), 8,509,350 (“the ’350 patent”), 9,113,419 (“the ’419 patent”), 8,619,726 (“the ’726 patent”), 8,761,130 (“the ’130 patent”), 9,288,825 (“the ’825 patent”), 7,706,348 (“the ’348 patent”), and 8,995,924 (“the ’924 patent”), and declaratory judgment of noninfringement and invalidity of Huawei’s patents-in-suit. Answer and Am. Counterclaims (Dkt. No. 91[redacted], Dkt. No. 90-2[sealed]).

At the initial case management conference, the parties disputed whether bifurcating the case would be the most efficient way to manage it. 9/13/16 Minute Entry (Dkt. No. 75); *see* Joint

Case Management St. (Dkt. No. 67). Huawei expressed its view that this case should be bifurcated to address the FRAND-related issues prior to the patent infringement issues, but Samsung insisted that Huawei was “asking the court to put the remedy before liability, put the cart before the horse, and that [would] not streamline things.” 9/13/16 Hr’g Tr. at 20:9–12 (Dkt. No. 82). Given that the parties could not agree, I denied the request.

On November 21, 2016, I denied Samsung’s motion to dismiss two of Huawei’s patents (the ’892 patent and the ’239 patent) on grounds that they fail to claim patent eligible subject matter under 35 U.S.C. § 101. Order Denying Samsung’s MTD (Dkt. No. 103).

On April 27, 2017, I granted Samsung leave to amend its infringement contentions to include additional infringing instrumentalities and change the conception dates for its ’827 patent and ’105 patent. Order Granting Samsung Leave to Am. Inf. Contentions (Dkt. No. 130). I also directed the parties to submit joint or competing case proposals to assist in managing the scope of this case.

On June 2, 2017, I issued a case management order adopting the case narrowing procedures implemented by the Hon. Lucy Koh in *Apple Inc. v. Samsung Electronics Co., Ltd. et al.*, 5:12-cv-630-LHK (Dkt. Nos. 394, 471). The order directed the parties to limit their infringement contentions to 5 patents, 10 asserted claims, and 15 accused products per side.²

On August 31, 2017, I issued the claim construction order for the five most significant terms selected by each side. Claim Construction Order (Dkt. No. 168).³

² In accordance with the order, the parties narrowed their asserted patents, claims, and products on September 11, 2017 (Dkt. Nos. 172, 173), March 16, 2018 (Dkt. Nos. 255, 256), and June 26, 2018 (Dkt. Nos. 318-3, 319). At present, Huawei has narrowed its asserted claims to the following: U.S. Patent 8,416,892, claims 1, 10; U.S. Patent 8,644,239, claims 7, 18; U.S. Patent 8,885,587, claims 3, 9; and U.S. Patent 8,724,613, claims 1, 5 (Dkt. No. 318-3[redacted]). And Samsung has narrowed its claims to the following: U.S. Patent No. RE44,105, claims 28, 29, and 32; U.S. Patent No. 8,509,350, claim 1; U.S. Patent No. 8,619,726, claims 11 and 13; U.S. Patent No. 8,761,130, claims 13 and 16; and U.S. Patent No. 9,288,825, claims 1 and 4 (Dkt. No. 319).

³ On March 1, 2018, I granted Huawei’s motion for clarification or reconsideration for one of the constructions, the term “first P-temporary Mobile Station Identity (P-TMSI) in an access message,” appearing in Huawei’s ’166 Patent, and assigned it its plain and ordinary meaning. Order on Huawei’s Mot. for Clarification, or in the alternative, Reconsideration of Claim Construction Order (Dkt. No. 247).

On March 26, 2018, I granted Huawei's request to stay infringement claims for Samsung's '588 patent pending inter partes review before the Patent Trial and Appeal Board (PTAB). Order Granting Stay of Infringement Claim for '588 Patent Pending Inter Partes Review (Dkt. No. 267).⁴ Under different circumstances, I granted a similar request from Samsung to stay certain infringement claims for Huawei's '197 patent and '166 patent pending inter partes review. Order Granting Stay of Infringement Claim for '197 and '166 Patents (Dkt. No. 307).

On April 13, 2018, I granted Samsung's motion for an antisuit injunction enjoining Huawei from enforcing the injunction orders issued by the Intermediate People's Court of Shenzhen, which had found that Samsung is infringing two of Huawei's Chinese SEPs, Order Granting Samsung's Mot. for Antisuit Injunction (Dkt. No. 280[redacted]). I denied Huawei's motion to alter, amend, or reconsider that order on June 19, 2018. (Dkt. No. 310).

On July 17, 2018, the parties stipulated to dismissal, without prejudice, of Huawei's cause of action for declaratory judgment of FRAND terms and conditions for a cross-license (count II). Stipulation (Dkt. No. 354); Order (Dkt. No. 361).

On July 3, 2018, Huawei filed its motion for summary judgment ("Huawei's MSJ") (Dkt. No. 328[redacted], Dkt. No. 327-8[under seal]), motion to preclude Samsung's FRAND experts from offering improper legal opinions ("Huawei's FRAND-related Mot. to Strike") (Dkt. No. 329[redacted], Dkt. No. 327-6[under seal]), and *Daubert* motion on technical issues ("Huawei's *Daubert* Mot.") (Dkt. No. 330[redacted], Dkt. No. 327-4[redacted]).

The next day, Samsung filed its motion for summary judgment ("Samsung's MSJ") (Dkt. No. 336[redacted], Dkt. No. 333-2[under seal]), motion to strike report and testimony of Huawei's experts Padilla, Lasinski, Jackson, deLisle, and Ding ("Samsung's *Daubert* Mot.") (Dkt. No. 335[redacted], Dkt. No. 334-2[under seal]), and motion to strike portions of expert reports, largely based on inadequate disclosures ("Samsung's Mot. to Strike") (Dkt. No. 337[redacted], Dkt. No. 334-2[under seal]).

⁴ Since Samsung had selected these claims as part of its case narrowing process, it was permitted to amend its election of asserted claims and patents. Order Regarding Substitution of Patent and Claims (Dkt. No. 268); Samsung's Am. Case Narrowing St. (Dkt. No. 275).

On August 15, 2018, I heard argument from the parties. This order addresses those motions. The numerous administrative motions filed in conjunction with these substantive motions will be addressed separately.

LEGAL STANDARD

I. SUMMARY JUDGMENT

A party is entitled to summary judgment where it “shows that there is no genuine dispute as to any material fact and [it] is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). A dispute is genuine if it could reasonably be resolved in favor of the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A fact is material where it could affect the outcome of the case. *Id.*

The moving party has the initial burden of informing the court of the basis for its motion and identifying those portions of the record that demonstrate the absence of a genuine dispute of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323–24 (1986). Once the movant has made this showing, the burden shifts to the nonmoving party to identify specific evidence showing that a material factual issue remains for trial. *Id.* The nonmoving party may not rest on mere allegations or denials from its pleadings, but must “cit[e] to particular parts of materials in the record” demonstrating the presence of a material factual dispute. Fed. R. Civ. P. 56(c)(1)(A); *see also Liberty Lobby*, 477 U.S. at 248. The nonmoving party need not show that the issue will be conclusively resolved in its favor. *Id.* at 248–49. All that is required is the identification of sufficient evidence to create a genuine dispute of material fact, thereby “requir[ing] a jury or judge to resolve the parties' differing versions of the truth at trial.” *Id.* (internal quotation marks omitted). If the nonmoving party cannot produce such evidence, the movant “is entitled to ... judgment as a matter of law because the nonmoving party has failed to make a sufficient showing on an essential element of her case.” *Celotex*, 477 U.S. at 323.

On summary judgment, the court draws all reasonable factual inferences in favor of the nonmoving party. *Liberty Lobby*, 477 U.S. at 255. “Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Id.* However, conclusory and speculative testimony does not raise a genuine factual

dispute and is insufficient to defeat summary judgment. *See Thornhill Publ'g Co., Inc. v. GTE Corp.*, 594 F.2d 730, 738–39 (9th Cir. 1979).

II. SUMMARY JUDGMENT ON NONINFRINGEMENT

Summary judgment of noninfringement requires a two-step analysis. “First, the claims of the patent must be construed to determine their scope. Second, a determination must be made as to whether the properly construed claims read on the accused device.” *Pitney Bowes, Inc. v. Hewlett–Packard Co.*, 182 F.3d 1298, 1304 (Fed. Cir. 1999) (internal citations omitted). “The determination of infringement, both literal and under the doctrine of equivalents, is a question of fact.” *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1318 (Fed. Cir. 2003); *see also Kilopass Tech. Inc. v. Sidense Corp.*, No. 10–cv–02066–SI, 2012 WL 3545286, at *4 (N.D. Cal. Aug. 16, 2012). Because the ultimate burden of proving infringement rests with the patentee, an accused infringer may show that summary judgment of noninfringement is proper either by producing evidence that would preclude a finding of infringement, or by showing that the evidence on file fails to create a material factual dispute as to any essential element of the patentee’s case. *See Novartis Corp. v. Ben Venue Labs., Inc.*, 271 F.3d 1043, 1046 (Fed. Cir. 2001). “Summary judgment of noninfringement may only be granted if, after viewing the alleged facts in the light most favorable to the nonmovant and drawing all justifiable inferences in the nonmovant’s favor, there is no genuine issue whether the accused device is encompassed by the patent claims.” *Id.*

Direct infringement may be proven either by literal infringement or under the doctrine of equivalents. “Literal infringement requires the patentee to prove that the accused device contains each limitation of the asserted clai[m].” *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000). “If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” *Id.* “The doctrine of equivalents holds that even if an accused product does not literally infringe the asserted claims of a patent, the product may infringe if the differences between the element of the accused product at issue and the claim limitation at issue are insubstantial.” *Kilopass*, 2012 WL 3545286, at *7. To defeat a defendant’s motion for summary judgment of noninfringement under the doctrine of equivalents, the plaintiff must

provide “particularized testimony and linking argument on a limitation-by-limitation basis that create[s] a genuine issue of material fact as to equivalents.” *AquaTex Indus., Inc. v. Techniche Solutions*, 479 F.3d 1320, 1328–29 (Fed. Cir. 2007). “Whether equivalency exists may be determined based on the ‘insubstantial differences’ test or based on the ‘triple identity’ test, namely, whether the element of the accused device performs substantially the same function in substantially the same way to obtain the same result.” *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1376 (Fed. Cir. 2008). “Whether a claim is infringed under the doctrine of equivalents may be decided on summary judgment if no reasonable jury could determine that the limitation and the element at issue are equivalent.” *Zelinski v. Brunswick Corp.*, 185 F.3d 1311, 1317 (Fed. Cir. 1999).

III. MOTIONS TO STRIKE

A. Patent Local Rules

“Patent Local Rule 3 requires patent disclosures early in a case and streamlines discovery by replacing the series of interrogatories that parties would likely have propounded without it.” *ASUS Computer Int’l v. Round Rock Research, LLC*, No. 12–CV–02099–JST, 2014 WL 1463609, at *1 (N.D. Cal. Apr. 11, 2014) (internal quotation marks and modifications omitted). The disclosure requirements of Rule 3 are designed “to require parties to crystallize their theories of the case early in the litigation and to adhere to those theories once they have been disclosed.” *Nova Measuring Instruments Ltd. v. Nanometrics, Inc.*, 417 F. Supp. 2d 1121, 1123 (N.D. Cal. 2006). “They are also designed to provide structure to discovery and to enable the parties to move efficiently toward claim construction and the eventual resolution of their dispute.” *Golden Bridge Tech. Inc. v. Apple, Inc.*, No. 12–cv–04882–PSG, 2014 WL 1928977, at *3 (N.D. Cal. May 14, 2014) (internal quotation marks omitted); *see also O2 Micro Int’l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355, 1365–66 (Fed. Cir. 2006) (“The local patent rules in the Northern District of California [require] both the plaintiff and the defendant in patent cases to provide early notice of their infringement and invalidity contentions, and to proceed with diligence in amending those contentions when new information comes to light in the course of discovery. The rules thus seek to balance the right to develop new information in discovery with the need for certainty as to the

1 legal theories.”).

2 Patent Local Rule 3–1 requires that a party claiming patent infringement serve a
3 “Disclosure of Asserted Claims and Infringement Contentions” no more than fourteen days after
4 the initial case management conference. This disclosure must include “[e]ach claim of each patent
5 in suit that is allegedly infringed by each opposing party, including for each claim the applicable
6 statutory subsections of 35 U.S.C. § 271 asserted.” Patent L.R. 3–1(a). The party must also
7 identify “where each limitation of each asserted claim is found within each Accused
8 Instrumentality,” and “[w]hether each limitation of each asserted claim is alleged to be literally
9 present or present under the doctrine of equivalents.” Patent L.R. 3–1(e). “The Patent Local
10 Rules require a limitation-by-limitation analysis, not a boilerplate reservation.” *Rambus Inc. v.*
11 *Hynix Semiconductor Inc.*, No. C-05-00334 RMW, 2008 WL 5411564, at *3 (N.D. Cal. Dec. 29,
12 2008).

13 Patent Local Rule 3–3 requires parties accused of infringement to serve invalidity
14 contentions. The invalidity contentions must identify “each item of prior art that allegedly
15 anticipates each asserted claim or renders it obvious.” Patent L.R. 3–3(a). If obviousness is
16 alleged, the invalidity contentions must contain “an explanation of why the prior art renders the
17 asserted claim obvious, including an identification of any combinations of prior art showing
18 obviousness.” Patent L.R. 3–3(b).

19 “Given the purpose behind [these] disclosure requirements, a party may not use an expert
20 report to introduce new infringement theories, new infringing instrumentalities, new invalidity
21 theories, or new prior art references not disclosed in the parties' infringement contentions or
22 invalidity contentions.” *Verinata Health, Inc. v. Sequenom, Inc.*, No. 12–cv–00865–SI, 2014 WL
23 4100638, at *3 (N.D. Cal. Aug. 20, 2014) (internal quotation marks omitted); *see also Golden*
24 *Bridge Tech. Inc. v. Apple, Inc.*, No. 12–cv–04882–PSG, 2014 WL 1928977, at *3 (N.D. Cal. May
25 14, 2014) (“Expert reports may not introduce theories not set forth in contentions.”). “Any
26 invalidity theories not disclosed pursuant to Local Rule 3–3 are barred ... from presentation at trial
27 (whether through expert opinion testimony or otherwise).” *MediaTek Inc. v. Freescale*
28 *Semiconductor, Inc.*, No. 11–cv–05341–YGR, 2014 WL 690161, at *1 (N.D. Cal. Feb. 21, 2014).

In determining whether to strike some or all of an expert report for failure to comply with the patent local rules, courts in this district have asked, “[W]ill striking the report result in not just a trial, but an overall litigation, that is more fair, or less?” *Apple Inc. v. Samsung Electronics Co.*, No. 11–cv–01846–PSG, 2012 WL 2499929, at *1 (N.D. Cal. June 27, 2012); *Verinata Health*, 2014 WL 4100638, at *3.

B. Federal Rules

Under Federal Rule of Civil Procedure 12(f), “[t]he court may strike from a pleading an insufficient defense or any redundant, immaterial, impertinent, or scandalous matter.” Fed. R. Civ. P. 12.

Federal Rule of Evidence 702 allows a qualified expert to testify “in the form of an opinion or otherwise” where:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

Expert testimony is admissible under Rule 702 “if it is both relevant and reliable.” *Cooper v. Brown*, 510 F.3d 870, 942 (9th Cir. 2007). “[R]elevance means that the evidence will assist the trier of fact to understand or determine a fact in issue.” *Id.* Under the reliability requirement, expert testimony must “relate to scientific, technical, or other specialized knowledge, which does not include unsubstantiated speculation and subjective beliefs.” *Id.* “Importantly, there must be a recognized body of knowledge, learning, or expertise upon which the witness relies. Where there is no field of expertise, nobody will qualify as an expert witness on the subject.” *Perez v. Seafood Peddler of San Rafael, Inc.*, No. 12–cv–00116–WHO, 2014 WL 2810144, at *2 (N.D. Cal. June 20, 2014) (internal quotation marks omitted). The burden is on the proponent of the expert testimony to show, by a preponderance of the evidence, that the admissibility requirements are satisfied. Fed. R. Evid. 702 advisory committee notes.

“Trial courts must exercise reasonable discretion in evaluating and in determining how to evaluate the relevance and reliability of expert opinion testimony.” *United States v. Sandoval-Mendoza*, 472 F.3d 645, 655 (9th Cir. 2006). A district courts serves as “a gatekeeper, not a factfinder.” *Id.* at 654.

DISCUSSION

I. PRELIMINARY ISSUE – CLAIM CONSTRUCTION ARGUMENTS

Before addressing the merits of any motions, I must address the glaring issue that pervades the parties’ motions for summary judgment and *Daubert* motions. Each side raises issues related to construing terms that were not selected by the parties for construction during the claim construction process. During that process, I addressed ten terms total as dictated by the Local Rules, allowing each side to identify its five most significant claim terms. Claim Construction Order (Dkt. No. 168).⁵ Now both sides present arguments untethered to the Claim Construction Order, which gives rise to two related issues—whether these arguments are properly raised at this stage at all, and, if so, whether they may provide a valid basis for challenging an expert via a *Daubert* motion.

Parties have done this before in my cases. *See, e.g., Fujifilm Corp. v. Motorola Mobility LLC*, No. 12-CV-03587-WHO, Dkt Nos. 196, 255; *Finjan, Inc. v. Sophos, Inc.*, No. 14-CV-01197-WHO, Dkt. Nos. 262. There, I followed the approach used by Judge Koh in *Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK. She found claim constructions presented at the summary judgment stage “untimely.” 2014 WL 252045, at *3 (N.D. Cal. Jan. 21, 2014). She noted, “[i]f the parties wanted to tee up summary judgment positions based on particular constructions, they ‘could (and should) have sought ... construction[s] to [those] effect[s].’” *Id.* (quoting *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 520 (Fed. Cir. 2012)). She recognized the courts’ “duty to resolve fundamental disputes regarding claim scope[,]” but found that it “fulfilled that duty when it provided a thorough claim construction opinion earlier in these

⁵ In the Joint Claim Construction and Prehearing Statement, the parties collectively identified a total of 102 terms for the 20 asserted patents that required construction (Dkt. No. 124). *See* Terms from Huawei’s Patents (Joint St., Ex. B; Dkt. No. 124-2); Terms from Samsung’s Patent (Joint St., Ex. C, Dkt. No. 124-3).

proceedings.” *Id.* (citing *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351 (Fed. Cir. 2008)); *see O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe *every* limitation present in a patent’s asserted claims.”).

Apple v. Samsung was “not a case like *O2 Micro*, where the district court erred when it declined to resolve a dispute over claim scope raised during claim construction.” 2014 WL 252045, at *3. Judge Koh left many of the terms that were not selected for construction to their plain and ordinary meaning, and she explained the “[s]ound practical reasons” for a court to decline to address claim construction arguments raised for the first time during summary judgment:

The Northern District of California's local rules require the parties to narrow the number of disputed terms to 10 as part of their joint claim construction statement. *See* Patent L.R. 4–3(c). In accordance with those rules, the parties made their selections at claim construction as to “the terms whose construction will be most significant to the resolution of the case.” *Id.* This requirement forces parties to identify potential case-dispositive terms at an early stage and also forces parties to help manage the scope of patent cases. The Court painstakingly adjudged the parties' claim construction disputes during the claim construction phase based on their in-depth technology tutorials and voluminous submissions of intrinsic and extrinsic evidence. The local rules and this Court did not set out a particular process for resolving claim construction disputes only to let the parties make additional arguments at the summary judgment phase untethered to those carefully structured rules.

Id. at *4. She concluded that she would “carefully consider” disputes over claim scope, even at the summary judgment stage, but only “as part of the infringement analysis, not part of the claim construction.” *Id.* (quoting *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1369 (Fed. Cir. 2012)); *see Thorner*, 669 F.3d at 1369 (noting that issues related to the scope of claim language that are not limited by the claims or specification are “part of the infringement analysis, not part of the claim construction”).

I will follow the same procedure here, and “view the parties’ disputes through the lens of whether a reasonable jury, armed with the Court’s claim construction as to certain terms and an instruction that the plain and ordinary meaning controls as to others, could or would necessarily conclude that the asserted claim reads on an accused device (or that a prior art reference reads on an asserted claim).” 2014 WL 252045, at *5. In determining the plain and ordinary meaning, I

1 will look to “[t]he written description and other parts of the specification” for “contextual light[.]”
 2 *Aventis Pharm. Inc. v. Amino Chemicals Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013). As Judge
 3 Koh noted, “the goal at this stage is not to complete the Sisyphean task of providing definitive
 4 guidance as to a term’s plain and ordinary meaning[.]” rather, “the Court must determine whether
 5 a jury, ‘free to rely on the plain and ordinary meaning of the term[s],’ may or must conclude that
 6 the accused devices (or prior art references) infringe (or anticipate) the asserted claims.” 2014 WL
 7 252045, at *5 (citation omitted).

8 As for whether claim construction arguments may provide a proper basis for striking or
 9 excluding an expert’s opinion, it depends whether an expert witness has opined on a claim’s scope
 10 beyond the plain and ordinary meaning of a term. Because claim construction is a matter of law to
 11 be decided by the court, *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 387 (1996), expert
 12 witnesses are not permitted to argue claim constructions to the jury. *Nationwide Transp. Fin. v.*
 13 *Cass Info. Sys., Inc.*, 523 F.3d 1051, 1058 (9th Cir. 2008); *see also Cordis Corp. v. Boston Sci.*
 14 *Corp.*, 561 F.3d 1319, 1337 (Fed. Cir. 2009) (“[I]t is improper to argue claim construction to the
 15 jury because the ‘risk of confusing the jury is high when experts opine on claim construction.’”).

16 Judge Koh repeated the edict in *Apple v. Samsung* that terms not construed by the court
 17 would be given their plain and ordinary meaning to a person of ordinary skill in the art. 2014 WL
 18 660857, at *3 (N.D. Cal. Feb. 20, 2014). From this premise, she concluded that “parties may
 19 ‘introduce evidence as to the plain and ordinary meaning of terms not construed by the Court to
 20 one skilled in the art,’ so long as the evidence does not amount to ‘arguing claim construction to
 21 the jury[.]” *Id.* (citations and alterations omitted); *see also MediaTek Inc. v. Freescale*
 22 *Semiconductor, Inc.*, No. 11-CV-5341 YGR, 2014 WL 971765, at *4–5 (N.D. Cal. Mar. 5,
 23 2014)(following same framework and noting that experts whose opinions on claim language
 24 depend on extrinsic evidence “reveal[] an intention to argue claim construction.”).

25 As I analyze the claim construction issues presented in the parties’ *Daubert* motions, I
 26 must determine whether an expert’s opinion “delve[s] too deeply into claim construction to be
 27 presented to the jury[.]” or, whether a party contends that the opinion (or argument) is wrong as a
 28 matter of law. *Fujifilm*, 2015 WL 1265009, at *6. If it is the former, the opinions may properly

be stricken or excluded, but if it is the latter, the issues should have been presented in a motion for summary judgment or addressed during the claim construction phase. *See id.* (“Motorola’s request to strike Haeberli’s testimony for applying ‘incorrect constructions’ of claim terms amounts to a second summary judgment motion. This alone justifies denying the request.”); *see also Finjan*, 2016 WL 4560071, at *14 (denying *Daubert* motion in part “because it amounts to an improper second summary judgment motion”). The problem, of course, is that there is no clear line distinguishing the two because a party that disagrees with an expert’s claim construction is likely to label it wrong as a matter of law. For this reason, my analysis will focus less on the technicalities of whether the arguments are more appropriately suited for a summary judgment motion or a *Daubert* motion, and more on the rule that “it is improper to argue claim construction to the jury... .” *Cordis*, 561 F.3d at 1337.⁶

II. HUAWEI’S MOTION FOR SUMMARY JUDGMENT

A. Samsung’s Antitrust Claim

1. Background

Samsung’s antitrust claim is premised on its contention that Huawei never had any intention of licensing its declared SEPs on FRAND terms and conditions, but nonetheless induced ETSI into including Huawei’s technology in the standards to exclude alternative mobile technologies, and then filed the Chinese injunction actions to coerce Samsung into accepting Huawei’s demand for excessive royalties. Am. Counterclaims ¶¶ 260–536. It seeks treble damages under section 2 and an order enjoining Huawei from seeking injunctive relief related to its SEPs.

Huawei attacks Samsung’s claim on several grounds. It insists that Samsung’s expert, Dr. Jerry Hausman, focused exclusively on the effects of the Chinese injunction actions and did not analyze how Huawei allegedly obtained monopoly power in the relevant markets (through its promises to ETSI). From this premise, it argues that Samsung has not demonstrated disputed facts establishing that Huawei has engaged in exclusionary or anticompetitive conduct forbidden by the

⁶ The separate, but related, question of whether these arguments are more suitable for motions in limine was not presented by the parties and is not addressed here.

Sherman Act. Huawei's MSJ at 3. It further contends that Samsung has not demonstrated harm to competition, as opposed to any alleged harm to Samsung itself. *Id.* It also urges that Samsung's claim is barred by the "act of state doctrine" which prohibits United States courts from assessing the legitimacy of the acts of a foreign sovereign. *Id.*

Dr. Hausman identified the relevant "technology market" for the SEPs for which Huawei sought an injunction as the patent, its counterparts in other jurisdictions, and alternative technology that can implement the same functionality. Hausman Report ¶¶ 41–53 (Stake Decl. ISO Opp'n to Huawei's MSJ ¶ 7 ("Stake Decl."); *id.*, Ex. 6, Dkt. No. 357-15[under seal]).⁷ He defined the geographic scope for the technology markets as worldwide and found that "Huawei is a monopolist with market power in each of the technology markets." *Id.* ¶¶ 54-55. He opined that "Huawei, by seeking an injunction ... gained a 'bargaining chip' that changed the threat point in the negotiations with Samsung[,]" and is thereby "seeking to exploit its market power and obtain higher royalties[,]" which "are equivalent to higher prices than would have occurred in the absence of the injunction and are thus a violation of Section 2." *Id.* ¶ 56; *see also id.* ¶ 18.⁸ He explained that "[f]iling for injunctions also should not be permitted because they confer a 'dangerous probability of success' for the SEP owner to exercise monopoly power beyond what is permitted under its FRAND obligations[,]" and "[t]he dangerous probability of success arises from the probability that a court will grant the requested injunction." *Id.* ¶ 58; *id.* n.50. And he posited that, "[a]t a minimum, Samsung's injury from the antitrust violation is comprised of the cost of

⁷ In Samsung's declaration in support of sealing portions of Huawei's motion for summary judgment and exhibits thereto, it noted that it does not maintain a claim of confidentiality over the Hausman Report or his deposition testimony, but it did not file an unredacted version of the Report. *See* Malmberg Decl. ISO Huawei's Admin. Mot. to File Under Seal Portions of Huawei's Summ. J. and Daubert Mots. ¶¶ 5, 7, 9 (Dkt. No. 344).

⁸ To support this position, Huawei also cites to Huawei executive Jason Ding's statement regarding the injunction actions:

Perhaps judges are quite reluctant to hear injunction cases because of its staggering impact on the market. . . Even if injunction order were to be enforced, does Huawei really want to kick Samsung out of China? Is it possible? Of course not. . . . At the end of the day, **your purpose is to get the royalties in return**, while using legal action as a **bargaining chip**.

Dkt. No. 235-7; *see also* Song Dep. at 23:10–19 (Stake Decl. ¶ 6; *id.*, Ex. 5).

multiple litigations, attorneys’ fees, and the experts’ fees paid to me and my team, and associated costs.” *Id.* ¶ 60.

Samsung also cites to the negotiation history to emphasize that Huawei demanded a 1.5 percent royalty for a license to its SEPs, even though no one has ever paid that rate, which is over [REDACTED], and would amount to Samsung making net payments totaling over [REDACTED] for a license covering a twelve-year period. Ding Dep. at 208:19–22 (Stake Decl. ¶ 2; *id.*, Ex. 1, Dkt. No. 357-6[under seal]); Hausman Report ¶¶ 23–29; Cheng Dep. at 137:12–15 (Stake Decl. ¶ 3; *id.*, Ex. 2, Dkt. No. 357-8[under seal]); Hausman Rebuttal Report ¶ 8 (citing Lasinski Report) (Stake Decl. ¶ 10; *id.*, Ex. 9, Dkt. No. 357-20[under seal]). According to Samsung, even Huawei’s own expert Dr. Lasinski, acknowledged that a FRAND rate for the 4G SEPs would be [REDACTED] the amount demanded by Huawei. Lasinski Report ¶ 100 (Stake Decl. ¶ 4; *id.*, Ex. 3, Dkt. No. 357-10).

2. Legal Framework

Section 2 of the Sherman Act makes it a felony for any person to “monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce...” 15 U.S.C. § 2.

“To prevail on this claim, [claimant] must prove that [defendant] (1) possessed monopoly power in the relevant market, (2) willfully acquired or maintained that power through exclusionary conduct and (3) caused antitrust injury.” *MetroNet Servs. Corp. v. Qwest Corp.*, 383 F.3d 1124, 1130 (9th Cir. 2004). The Supreme Court in *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004), analyzed the type of activities that would constitute anticompetitive or exclusionary conduct. It began from the premise, “as a general matter,” that there is no duty to deal with competitors. *Id.* at 407–08; *see also MetroNet*, 383 F.3d at 1131 (“The Court in *Verizon* stated that as a general matter ‘there is no duty to aid competitors.’”). It then analyzed the “few existing exceptions” to this general proposition and found that the present circumstances did not justify adding another exception to the rule. 540 U.S. at 411. In short, the possession of monopoly power and the charging of monopoly prices are not unlawful in themselves; rather, “the possession of monopoly power will not be found unlawful unless it is

accompanied by an element of anticompetitive *conduct*.” *Id.* at 407 (emphasis in original).

3. Analysis

a. Samsung Has Not Offered Evidence of Exclusionary Conduct

i. Refusal to Deal

As an initial matter, Samsung emphasizes its position that its claim is based on Huawei’s refusal to deal and is not limited to Huawei’s opening rate; rather, it contends that Huawei has maintained the same rate throughout negotiations, which it insists constitutes evidence of exclusionary conduct. Huawei counters that the refusal to deal doctrine of antitrust is wholly inapplicable in the standards arena. On the former point, I must view the evidence in the light most favorable to Samsung. On the latter point, I agree with Huawei,⁹ but I will nonetheless assess the evidence in the realm of a refusal to deal claim since Samsung relies on it. Even accepting Samsung’s perspective of the negotiating history, it has not established that Huawei’s negotiating conduct and pursuit of injunctive relief constitutes exclusionary conduct necessary to prove its monopolization claim.

Samsung relies on *Federal Trade Commission v. Qualcomm Inc.*, No. 17-CV-00220-LHK, 2017 WL 2774406 (N.D. Cal. June 26, 2017) to insist that Huawei’s conduct violates the “antitrust duty to deal.”¹⁰ In *FTC v. Qualcomm*, Judge Koh summarized *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985), *Verizon Comm’s, Inc. v. Law Offices of Curtis V. Trinko*, 540 U.S. 398 (2004), and *MetroNet Services Corp. v. Qwest Corp.*, 383 F.3d 1124 (9th Cir. 2004), and found “that a plaintiff alleges an antitrust duty to deal where the plaintiff alleges ‘[a] decision to alter a [voluntary] course of dealing together with evidence of anticompetitive malice,’ and where the recognition of an antitrust duty to deal will not present significant judicial administrability concerns.” 2017 WL 2774406, at *20 (quoting *SmithKline Beecham Corp. v.*

⁹ As discussed below, the irrelevance of the doctrine is clear; Huawei admits that it is a monopolist in the market because ETSI has accepted its declared SEPs.

¹⁰ It is worth noting that the order addressed a motion to dismiss, not a motion for summary judgment, as I am presented with here. *See Qualcomm*, 2017 WL 2774406, at *22 (“FTC’s allegations are sufficient, at this stage of the proceedings, to allege that Qualcomm’s refusal to deal is motivated by ‘anticompetitive malice.’”).

1 *Abbott Labs.*, 2014 WL 6664226, at *4 (N.D. Cal. Nov. 24, 2014)); *see also Safeway Inc. v.*
 2 *Abbott Labs.*, 2010 WL 147988, at *6 (N.D. Cal. Jan. 12, 2010) (“Taken together, *Aspen Skiing*
 3 and [*Verizon*] demonstrate that liability under § 2 can arise when a defendant voluntarily alters a
 4 course of dealing and ‘anticompetitive malice’ motivates the defendant’s conduct.”).

5 Judge Koh concluded that the FTC had adequately alleged a violation of the antitrust duty
 6 to deal under the *Metronet* factors because Qualcomm had voluntarily agreed to license its SEPs in
 7 accordance with FRAND and later refused to do so, its “no license-no chips” policy demonstrated
 8 that its refusal to license was motivated by anticompetitive malice, and “recognizing a duty to deal
 9 in this case would not require courts to play a larger role in setting the terms of dealing than the
 10 role that courts *already* play in determining appropriate royalties in patent cases.” 2017 WL
 11 2774406, at *20–22. She also determined, as the Third Circuit recognized in *Broadcom Corp. v.*
 12 *Qualcomm Inc.*, 501 F.3d 297, 316 (3d Cir. 2007), that the lack of “a regulatory structure designed
 13 to deter and remedy anticompetitive harm[.]” *Verizon*, 540 U.S. at 412, supports finding an
 14 antitrust duty to deal in the context of FRAND commitments and SSOs, which involve private
 15 entities and organizations. 2017 WL 2774406, at *23; *see Broadcom*, 501 F.3d at 317 (“No such
 16 regulatory framework [as in *Verizon*] exists here.”).

17 Huawei does not dispute that the first and third *MetroNet* factors are met here—it altered a
 18 voluntary and profitable course of dealing given its commitments to ETSI and there are no judicial
 19 administrability concerns. Rather, Huawei contends that Samsung has not offered any evidence of
 20 Huawei’s anticompetitive malice, nor has it otherwise demonstrated that Huawei obtained its
 21 monopoly power in the relevant markets by exclusionary conduct. Huawei MSJ at 6.

22 Unlike the circumstances in *Qualcomm*, Samsung does not allege that Huawei refused to
 23 license its declared SEPs *on any terms*. *See* 2017 WL 2774406, at *19–23 (relying on
 24 Qualcomm’s outright refusal to license FRAND-encumbered SEPs to competing chip
 25 manufacturers). Rather, Samsung’s claim depends on its contention that Huawei’s offers to
 26 license its SEPs were not on FRAND terms, and Huawei proceeded to pursue injunctive relief.
 27 *See Hausman Dep.* at 203:12–17 (testifying to his opinion that Huawei acquired monopoly power,
 28 not by exclusionary conduct, but “when the SSO adopted it [Huawei’s technology], and they

[Huawei] said they would not exercise it because they agree to FRAND.”). It relies on *Aspen Skiing* for the proposition that exorbitant offers constitute a refusal to deal, and it argues that the determination of whether Huawei’s offers were exorbitant is a fact question. *See also MetroNet*, 383 F.3d at 1132 (“An offer to deal with a competitor only on unreasonable terms and conditions can amount to a practical refusal to deal.”); *Safeway Inc. v. Abbott Labs.*, No. C 07-05470 CW, 2010 WL 147988, at *7 (N.D. Cal. Jan. 12, 2010) (“By setting such unattractive terms, Abbott essentially refused to deal with its competitors.”).

But the refusal to deal cases are inapplicable to the standards setting world. The parties do not dispute that Huawei acquired its monopoly power in the relevant markets through its declarations to ETSI, not through its alleged refusal to deal with Samsung. As discussed below, Samsung seeks to claim antitrust injury as a consumer in the relevant market. It cannot turn around and attempt to show exclusionary conduct based on its status as a competitor. In other words, Samsung has not proven that Huawei “acquired or maintained” its monopoly power through exclusionary conduct. *See MetroNet*, 383 F.3d at 1130.

Moreover, it is well settled that *Aspen Skiing*, “the leading case for § 2 liability based on refusal to cooperate with a rival,” “is at or near the outer boundary of § 2 liability.” *Trinko*, 540 U.S. at 409. “As the Supreme Court has repeatedly emphasized, there is ‘no duty to deal under the terms and conditions preferred by [a competitor’s] rivals[.]’” *Aerotec Int’l, Inc. v. Honeywell Int’l, Inc.*, 836 F.3d 1171, 1184 (9th Cir. 2016)(quoting *Pac. Bell Tel. Co. v. Linkline Commc’ns, Inc.*, 555 U.S. 438, 457 (2009)); *see also Townshend v. Rockwell Int’l Corp.*, No. C99-0400SBA, 2000 WL 433505, at *8 (N.D. Cal. Mar. 28, 2000) (dismissing antitrust claim in part because “[a] patent owner’s pursuit of optimum royalty income is not an act in restraint of trade which violates the antitrust laws.”). Because Samsung has offered no evidence that Huawei has outright refused to deal with Samsung, “*Aspen Skiing* offers no relief here.” *Aerotec*, 836 F.3d at 1184.

ii. **Broadcom Claim**¹¹

While Samsung’s antitrust claim has morphed into a refusal to deal claim, Huawei notes

¹¹ It is also worth noting that Samsung has not presented (and Huawei is not aware of) any cases in which a plaintiff has prevailed at trial asserting an antitrust claim premised on *Broadcom*.

that the claim as alleged is actually premised on the *Broadcom* case. *E.g.*, Am. Counterclaims ¶ 263 (“Huawei’s promises to license its allegedly essential patents on FRAND terms and conditions were intentionally false.”); *id.* ¶ 266 (“Huawei’s actions show it has never intended to comply with its promises to license its allegedly essential patents on FRAND terms and conditions.”). In *Broadcom*, the Third Circuit analyzed “whether Broadcom ha[d] stated actionable anticompetitive conduct with allegations that Qualcomm deceived relevant SDOs [standards-determining organizations] into adopting the UMTS [Universal Mobile Telecommunications System] standard by committing to license its WCDMA technology on FRAND terms and, later, after lock-in occurred, demanding non-FRAND royalties.” 501 F.3d at 313. The court held that

(1) in a consensus-oriented private standard-setting environment, (2) a patent holder’s intentionally false promise to license essential proprietary technology on FRAND terms, (3) coupled with an SDO’s reliance on that promise when including the technology in a standard, and (4) the patent holder’s subsequent breach of that promise, is actionable anticompetitive conduct.

Id. at 314; *see also Apple Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2011 WL 4948567, at *4 (N.D. Cal. Oct. 18, 2011) (“[I]ntentionally false promises to SDOs regarding licenses with FRAND terms can give rise to actionable claims under Section 2 of the Sherman Act.”).

Samsung points to Huawei’s initial SEP licensing proposal to Samsung in 2008, which Samsung contends was not FRAND, simultaneous with its patent disclosures to ETSI, and its pursuit of injunction-only relief in China, to substantiate its claim that Huawei “did not intend to license its proprietary technology at FRAND rates at the time it promised ETSI that it would do so.” Opp’n to Huawei MSJ at 4–5. And it emphasizes that “the issue of intent is nearly always ‘a fact question.’” *Id.* at 6. The latter point gains it little ground: “Until recently, summary judgment was disfavored in antitrust cases, but any presumption against the granting of summary judgment in complex antitrust cases has now disappeared[.]” *In re Online DVD-Rental Antitrust Litig.*, 779 F.3d 914, 921 (9th Cir. 2015) (internal quotation marks, citations, and alterations omitted). Accordingly, Samsung cannot merely rely on the factual nature of the inquiry into intent to survive Huawei’s motion.

Its former point does not support its claim that Huawei made intentionally false promises

to ETSI. As an initial matter, Samsung cannot (and does not even attempt to) explain the fact that Huawei has licensed its SEPs to other entities as part of its commitments to ETSI. Moreover, Huawei underscores (and Samsung acknowledges) that Huawei had publicly announced as early as 2008 that it expected to seek a royalty for its LTE portfolio of up to 1.5 percent, which would be “negotiable in bilateral negotiations.” *See* Stasik Expert Report Regarding ETSI and Standards Setting Matters at ¶ 66, submitted in *Apple Inc. v. Samsung Electronics Co., Ltd. et. al.*, Case No. 11-cv-01846-LHK (N.D. Cal. Mar. 16, 2012) (including Huawei’s public statement) (McBride Decl. ISO Reply ¶ 2; *id.*, Ex. 44; Dkt. No. 371-9 [under seal]); J. Ding Dep. at 208:13–25 (noting Huawei’s public announcement) (Stake Decl. ¶ 2; *id.*, Ex. 1; Dkt. No. 357-6 [under seal]). Samsung has previously acknowledged that there is nothing wrong with beginning negotiations at a “headline” rate. Chang Dep. at 32–34 (McBride Decl. ISO Reply ¶ 3; *id.*, Ex. 45; Dkt. No. 371-10 [under seal]) (acknowledging Stasik’s view that Samsung’s ■ percent royalty offer was FRAND and would be an appropriate headline rate to open negotiations); *see also* Leonard Dep. at 70:15–71:6 (McBride Decl. ISO Huawei’s Reply ISO MSJ ¶ 4, *id.*, Ex. 46)(testifying that starting negotiations at an opening rate of 1.5 percent would not by itself, be problematic). As Huawei puts it, “[t]he fact that [it] opened negotiations at its previously stated public rate, and maintained that opening offer for a time in the absence of any responsive counter-proposal from Samsung, would not permit a reasonably jury to conclude that Huawei never intended to abide by its FRAND commitments.” Reply ISO Huawei MSJ at 4. And the fact that the headline rate was public knowledge certainly undermines any claim that it unlawfully obtained its monopoly power through its representations to ETSI.

As previously mentioned, Samsung insists that its claim is not limited to Huawei’s opening rate; it is based on Huawei maintaining that rate throughout the course of negotiations. It also cites to Huawei’s subsequent pursuit of injunctive-only relief in China to substantiate its claim that Huawei had no intention of licensing its SEPs on FRAND terms. On the other hand, Huawei identifies several facts negating any possible inference that it never intended to abide by its FRAND obligations: it has repeatedly offered to submit this dispute to binding arbitration, it initially sought to bifurcate the issues in this case so that the FRAND-related issues could be

1 addressed on an expedited basis before delving into the patent issues, and it is and has been
2 willing to withdraw the Chinese injunction actions so long as Samsung agrees to a binding process
3 to determine the FRAND terms of a cross-license between the parties. Reply at 4–5. Huawei’s
4 eagerness to resolve the FRAND issue is not indicative of a party who refuses to deal.

5 At the hearing, Samsung insisted that *Broadcom* is irrelevant to a refusal to deal claim, and
6 that intent is not required under section 2. Samsung’s arguments are unpersuasive. While section
7 2 does not explicitly reference the “intent” of the accused, the case law makes clear that a certain
8 mental state is an explicit element of both a refusal to deal claim of the type Samsung wishes to
9 pursue here and a *Broadcom* claim of the type it actually pursues. See *Qualcomm*, 2017 WL
10 2774406, at *20 (requiring evidence of anticompetitive malice); *Broadcom*, 501 F.3d at 314
11 (requiring an intentionally false promise).

12 It further insisted that Huawei is wrong to contend that Samsung cannot prove bad intent
13 with conduct occurring after the patents were declared essential. But courts have explicitly
14 declined to expand *Broadcom* “to reach violations of FRAND commitments occurring after the
15 standard’s adoption.” E.g., *Godo Kaisha IP Bridge I v. TCL Commc’n Tech. Holdings Ltd.*, No.
16 CV 15-634-SLR-SRF, 2017 WL 750700, at *7 (D. Del. Feb. 27, 2017).¹²

17 Samsung has not offered any evidence of Huawei’s fraudulent intent, but even if it had, it
18 would still be insufficient to establish unlawful exclusionary conduct. See *Rambus Inc. v. F.T.C.*,
19 522 F.3d 456, 466 (D.C. Cir. 2008) (“[A]n otherwise lawful monopolist’s end-run around price
20 constraints, even when deceptive or fraudulent, does not alone present a harm to competition in
21 the monopolized market.”). Compare *Aerotec*, 836 F.3d at 1184, 1189 (affirming summary
22 judgment on refusal to deal claim where plaintiff “simply did not like the business terms” offered
23 by the alleged monopolist), with *Hynix Semiconductor Inc. v. Rambus, Inc.*, 527 F. Supp. 2d 1084,
24 1098 (N.D. Cal. 2007)(finding sufficient allegations of anticompetitive conduct where “[t]he
25 Manufacturers have alleged that Rambus participated in a standards-setting organization,
26 understood its intellectual property disclosure policy, withheld information about its patent

27
28 ¹² The report and recommendation was subsequently adopted by the district court. 2017 WL 1055958 (D. Del. Mar. 20, 2017).

1 applications, waited until the industry was irreversibly ‘locked in’ to the standard, and then began
2 a litigation campaign to extract royalties.”).

3 That failure defeats Samsung’s antitrust claim as a matter of law. But the claim also fails
4 because Samsung has not offered any evidence of antitrust injury.

5 **4. Samsung Has Not Demonstrated Antitrust Injury**

6 “The antitrust laws ... were enacted for ‘the protection of competition not competitors[.]’”
7 *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488 (1977). As a result, an antitrust
8 claimant “must demonstrate injury to competition in the market as a whole, not merely injury to
9 itself as a competitor.” *Gorlick Distribution Centers, LLC v. Car Sound Exhaust Sys., Inc.*, 723
10 F.3d 1019, 1024–25 (9th Cir. 2013).

11 The only “injury” to Samsung disclosed in Dr. Hausman’s Report is Samsung’s litigation
12 costs, which Dr. Hausman conceded were “harms to Samsung,” not “harms to consumers.”
13 Hausman Report ¶ 60; *see also* Hausman Dep. at 214:6–9 (Ex. 7). While litigation costs may
14 constitute antitrust injury in some cases, Samsung has not established those circumstances here.
15 *See Apple, Inc. v. Motorola Mobility, Inc.*, 886 F. Supp. 2d 1061, 1076 (W.D. Wis. 2012) (finding
16 no antitrust injury where antitrust claimant refused to pay the allegedly excessive royalty rate and
17 the only purported injury was the attorney fees and costs incurred in response to patent litigation).
18 *Compare* *supra* section I.A.3 (finding no evidence of anticompetitive conduct), *with Hynix*, 527 F.
19 Supp. 2d at 1098 (“Because Rambus’ alleged conduct at JEDEC can independently qualify as an
20 anticompetitive harm under section 2, the court finds that Rambus’ current patent litigation is
21 ‘causally connected’ to that behavior and therefore properly included in an ‘anticompetitive
22 scheme’ allegation.”).

23 In opposition, Samsung points to Huawei’s purported market power in the relevant
24 markets, *see* Opp’n at 9 (citing Hausman Report ¶¶ 55–56), and urges that it is harmed as a
25 purchaser of Huawei’s SEPs in the relevant markets identified by Dr. Hausman (which Huawei
26 has not challenged here), so its injury arises as a customer, not a competitor. But Huawei’s market
27 power alone does not establish any antitrust injury. *See* Opp’n at 9 (arguing that “it will pay
28 overcharges and/or incur losses as a result of Huawei’s monopolization.”). And Samsung’s

potential harm likewise does not “demonstrate injury to competition in the market as a whole,” rather than “injury to [Samsung] as a competitor.” *Gorlick*, 723 F.3d at 1024–25. Samsung has not demonstrated the requisite injury to competition.¹³

To the extent that Samsung intends to rely on the potential harm to consumers in the event the Chinese injunctions are enforced, Opp’n at 9 n.8, that speculative harm would at most substantiate a claim of attempted monopolization.¹⁴ Samsung has not alleged or pursued such a claim.

In sum, Samsung has not shown disputed facts establishing Huawei’s anticompetitive conduct or any antitrust injury. Huawei’s motion for summary judgment as to Samsung’s counterclaim for antitrust violation is GRANTED.¹⁵

B. Noninfringement as to the ’350 Patent

Asserted claim 1 of the ’350 Patent requires “receiving a cell-specific parameter (P_B) signaled by one or more higher layers from the base station; and determining a cell-specific ratio (p_B/p_A)... .” ’350 patent at 14:31–35. Huawei insists that it is entitled to summary judgment of noninfringement, both literal and under the doctrine of equivalents (DOE), because the undisputed evidence shows that the quantization coefficients used to determine the ratio are different for different phones within a cell, Samsung has offered no evidence that Huawei’s UE’s “determine” the cell-specific ratio, and Samsung’s DOE theory relies on inadequate boilerplate recitations.

¹³ Samsung footnotes that the antitrust injury is “less demanding” when an antitrust claimant seeks injunctive relief. See Opp’n at 9 n.9 (citing *Palmyra Park Hosp. Inc. v. Phoebe Putney Mem’l Hosp.*, 604 F.3d 1291, 1299 (11th Cir. 2010)). The *Palmyra* court noted that “[t]he antitrust standing injury under § 16 of the Clayton Act [allowing injunctive relief] is less demanding than under § 4 [allowing recovery for treble damages].” 604 F.3d at 1299. It explained that “a plaintiff seeking relief under § 16 must still allege an antitrust injury, just as the plaintiff would under § 4[,]” but in the context of injunctive relief “we are less concerned about whether the party would be the most efficient enforcer[.]” *Id.* at 1299–1300. The court concluded that “[t]he takeaway ... is that ‘if a plaintiff has standing to bring an antitrust action under section 4, he will also have standing under section 16.’” *Id.* at 1300. *Palmyra*, therefore, does not help Samsung here.

¹⁴ A claim for attempted monopolization requires “proof of a dangerous probability that they would monopolize a particular market and specific intent to monopolize.” *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 459 (1993). Given the explicit requirement related to intent, an attempted monopolization claim would fare no better.

¹⁵ Given this conclusion, I need not determine whether the act of state doctrine bars Samsung’s antitrust claim.

Huawei MSJ at 12–13. Samsung counters with evidence that Huawei’s accused products “determine a cell-specific ratio” by selecting values called quantization coefficients that correspond to the same cell-specific ratios required under the LTE standard. Opp’n at 17–18; *see* Huawei Technical Document produced as SAMSUNG-HNDCA-000614275-614370 (Stake Decl. ¶ 12; *id.*, Ex. 11); Huawei Technical Document produced as SAMSUNG-HNDCA-000614371-614439 (Stake Decl. ¶ 13; *id.*, Ex. 12).

One of Samsung’s technical experts, Dr. Paul Prucnal, provided a technical analysis of documents, testimony, and source code to show that Huawei’s accused products determine a cell-specific ratio as required under the LTE standard by selecting a value called a quantization coefficient that corresponds to a cell-specific ratio. Prucnal Expert Report ¶¶ 557–570 (Stake Decl. ¶ 15; *id.*, Ex. 14; Dkt. No. 357-29 [under seal]); *see also* Prucnal Dep. at 89:23–90:9 (explaining his demonstrative showing that the accused products use the same cell-specific ratios) (Stake Decl. ¶ 17; *id.*, Ex. 16; Dkt. No. 357-33 [under seal]); Prucnal Demonstrative (showing the same cell-specific ratios) (Stake Decl. ¶ 18; *id.*, Ex. 17; Dkt. No. 357-35 [under seal]). Samsung also highlights Huawei’s admission that the accused products practice the applicable 3GPP standard. Huawei’s March 9, 2018 Supplemental Responses to Samsung’s Interrogatories at 21–23 (Stake Decl. ¶ 16; *id.*, Ex. 15; Dkt. No. 357-13 [under seal]).

Huawei wishes to limit the meaning of “determining” to “calculating”; similar to Samsung’s attempts to limit “obtaining” and “allocating” with respect to the ’239 patent. *See infra* section V.A.3. Huawei did not select “determining” for claim construction, and the term will be given the full range of its plain and ordinary meaning. Viewing this evidence in the light most favorable to Samsung, it has identified disputed evidence that Huawei’s accused products literally infringe the ’350 patent, claim 1 by “determin[ing] a cell-specific ratio” when the UEs select quantization coefficients that correspond to the cell-specific ratio.

Even if I did not find disputed evidence that the accused products literally infringe, they would at least infringe under a DOE theory since Huawei’s arguments against infringement largely rely on whether the UE’s act of selecting a quantization coefficient is equivalent to determining a cell-specific ratio. *See* Reply ISO Huawei MSJ at 8 (noting that the Prucnal Report

fails to show the calculation of any ratios). Dr. Prucnal’s opinions, which link the accused devices to a particular claim limitation, Prucnal Report ¶ 590 (explaining DOE theory for the ’350 patent, claim 1), are not the type of boilerplate DOE assertions rejected by courts. *E.g.*, *PersonalWeb Techs. LLC v. Int’l Bus. Machines Corp.*, No. 16-CV-01266-EJD, 2017 WL 2180980, at *16 (N.D. Cal. May 18, 2017) (“[E]ven if the Court were to look past PersonalWeb’s failure to comply with the patent local rules, summary judgment is appropriate because PersonalWeb has failed to provide sufficient evidence to create a triable issue of fact that there is infringement under the doctrine of equivalents.”); *OptimumPath, LLC v. Belkin Int’l, Inc.*, No. C 09- 01398 CW, 2011 WL 1399257, at *8 (N.D. Cal. Apr. 12, 2011) (“OptimumPath also relies on a blanket statement, asserting substantial similarities as to the instrumentalities, but failing to link those similarities to particular claims or limitations within the ’281 patent.”).

To the extent that Huawei wishes to rely on the inadequacy of Samsung’s disclosures in its infringement contentions, that alone does not justify granting its motion for summary judgment. “While the Rules are thereby intended to hasten resolution on the merits, they are *not* ... a mechanism for resolving the *merits* of the parties’ dispute.” *FusionArc, Inc. v. Solidus Networks, Inc.*, No. C 06-06760RMW(RS), 2007 WL 1052900, at *2 (N.D. Cal. Apr. 5, 2007); *see also* *PersonalWeb*, 2017 WL 2180980, at *16 (“Courts in this district have cited deficient infringement contentions as additional bases for granting summary judgment of noninfringement with respect to doctrine of equivalents. However, what ultimately governs the summary judgment determination is the standard under Fed. R. Civ. R. 56(c).” (citations omitted)).

Huawei’s motion for summary judgment of noninfringement of claim 1 of the ’350 patent is DENIED.

C. Noninfringement as to the ’130 Patent

Independent claim 13 recites the following “method for transmitting a signal in a slot of a sub-frame in a wireless communication system... :

mapping a reference signal to a middle symbol in the slot;
mapping the data information to remaining symbols in the slot that
are not used to map the reference signal;
mapping the acknowledgement information to first symbols among
the remaining symbols in the slot, the first symbols not being used
to map reference signals and the first symbols being directly

adjacent to the middle symbol; and

...

'130 Patent, claim 13 at 8:30–37 (Dkt. No. 328-34). Huawei contends that this method claim, and dependent claim 16, recite a series of active steps that must be performed in a precise order, and Samsung's expert failed to offer any evidence that Huawei's products perform the accused functionality in the order claimed[,]” and “the undisputed evidence shows that Huawei products do not perform the function in the order claimed. Huawei's MSJ at 17 (citing Bambos Inf. Report ¶¶ 550–632); *see also* Bambos Inf. Report ¶ 468; Mahon Decl. ¶¶ 32–35.

Samsung counters that Huawei's argument depends on injecting its proposed construction that “[t]he second and third steps must be performed after the first.” Joint Claim Construction St. at 3 (Dkt. No. 124-3). But, according to Samsung, Huawei elected not to include this claim term in those terms subject to claim construction, thereby waiving its opportunity to have the claim construed and relegating the claim term to its plain and ordinary meaning.¹⁶

The Federal Circuit has explained, “[a]s a general rule, ‘unless the steps of a method claim actually recite an order, the steps are not ordinarily construed to require one.’” *Mformation Techs., Inc. v. Research in Motion Ltd.*, 764 F.3d 1392, 1398 (Fed. Cir. 2014) (alterations omitted) (quoting *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1342 (Fed. Cir. 2001)). “However, a claim ‘requires an ordering of steps when the claim language, as a matter of logic or grammar, requires that the steps be performed in the order written, or the specification directly or implicitly requires’ an order of steps.” *Id.*

In Samsung's view, “[a]nalyzing the word ‘remaining’ in context, as required, reveals that the plain and ordinary meaning refers *only* to a spatial location for (1) mapping the reference signal and (2) mapping the data and acknowledgement information (as opposed to a temporal order in which those steps need to occur).” Opp'n to Huawei's MSJ at 16 (emphasis in original) (citing Ex. 20 ¶¶ 174–77).¹⁷ Samsung's attempts to limit the plain and ordinary meaning of

¹⁶ Huawei points out that Samsung proposed “no construction necessary” for each of the terms at issue for the '130, '105, and '825 patents. *See* Joint Claim Construction St. (Dkt. No. 124-3).

¹⁷ During the hearing, Samsung explained this interpretation that the word “remaining” refers to “where” the data information is mapped, not “when” it is mapped.

“remaining” to a spatial location rather than a temporal order are unpersuasive. Samsung wishes to have the middle symbol “reserved” for the reference signal without first mapping it. But the claim does not dictate *reserving* the middle symbol in the slot for the reference symbol. To the contrary, the claims disclose *mapping* the reference symbol. As Huawei explains, the “remaining symbols in the slot that are not used to map the reference signal” do not exist until the reference signal is mapped to the middle symbol in the slot. Huawei MSJ at 17. The plain language of the claim terms requires an “ordering of steps” because no symbols are “remaining” until the reference symbol is first mapped to the middle symbol in the slots. *See Mformation Techs.*, 764 F.3d at 1398.

Assuming an order inherent in the claim language, Huawei contends that Samsung failed to offer evidence that Huawei’s products perform the claimed “mapping” in the order required. Samsung does not appear to explicitly contest this assertion, but offers the opinion of its expert, Dr. Nicholas Bambos, that Huawei’s products map a reference signal to a middle symbol in the slot, data to the remaining symbols in the slot, and acknowledgement information to first symbols among the remaining symbols... .” Bambos Expert Report ¶¶ 530–49 (Stake Decl. ¶ 21; *id.*, Ex. 20; Dkt. No. 357-40 [under seal]); *id.* ¶¶ 550–94, 595–632 (McBride Decl. ¶ 37; *id.*, Ex. 36; Dkt. No. 327-51 [under seal]). Dr. Bambos offered his “opinion that the difference between each of the Accused Instrumentalities and the claim elements in claims 13 and claims 16 are insubstantial” because the accused products are “performing substantially the same function (i.e., PUSCH signal transmission) in substantially the same way (placing ACK/NAK information in the symbols directly adjacent to the DM RS along with data and transmitting the DM RS, ACK/NAK, and data, which is mapped to every symbol except for the symbols containing the DM RS and is multiplexed with CQI) to get substantially the same result (i.e., transmitting a signal with minimal distortion of the underlying information).” Bambos Expert Report ¶ 792. Dr. Bambos concluded that the order of the steps “is an insubstantial part” of the asserted claims. *Id.* ¶ 793.

Huawei argues that Dr. Bambos’s DOE analysis involves several legal errors, and is insufficient to counter its motion for summary judgment. First, he analyzes the function/way/result of the entire claim, *see id.* ¶¶ 792–93, rather than the limitation asserted to be

met by an equivalent. Second, his analysis “vitate[s] these claim terms” because it “eliminate[s] the requirement to map to ‘remaining symbols.’” Huawei MSJ at 20.

Samsung never directly addresses the first argument. It simply reiterates Dr. Bambos’s opinion that order is irrelevant. “[T]he all limitations rule requires that equivalence be assessed on a limitation-by-limitation basis, as opposed to from the perspective of the invention as a whole.” *Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1358 (Fed. Cir. 2005). But when the “limitation” at issue is the implication that the steps of the claim must be performed in order, it seems appropriate to assess equivalence from the perspective of the invention as a whole.

As to the second argument, Samsung counters that “[v]itiation is not an exception or threshold determination that forecloses resort to the doctrine of equivalents, but is instead a legal conclusion of a lack of equivalence based on the evidence presented and the theory of equivalence asserted.” *Cadence Pharm. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1371 (Fed. Cir. 2015). In *Cadence*, the Federal Circuit affirmed the district court’s rejection of defendant’s vitiation argument and saw no clear error in the district court’s finding of infringement under the doctrine of equivalents when it relied on expert testimony indicating that the timing of steps was “an insubstantial difference.” *Id.* at 1370–72.

As in *Cadence*, Samsung highlights its expert’s opinion that the order of steps is an “insubstantial difference.” It has offered evidence that Huawei’s products infringe claims 13 and 16 of the ’130 patent under a DOE theory but not under direct infringement. Huawei’s motion for summary judgment of noninfringement of the ’130 patent is GRANTED IN PART AND DENIED IN PART.

D. Noninfringement as to the ’105 Patent

Asserted claims 28, 29, and 32 require “modulating data information to generate non-FT precoded modulation data symbols” and then “Fourier Transform (FT) pre-coding the non-FT precoded modulation data symbols to generate FT pre-coded symbols.” Huawei contends that its products cannot infringe as a matter of law because Samsung’s expert testified that the “FT pre-coded symbols” comprise the physical uplink shared channel (PUSCH), which contains both control information and data information. Prucnal Report ¶¶ 362–77, 392–412; *see also* Prucnal

Dep. 46:25-47:4, 64:22-65:5, 68:24-69:18 (testifying that control quality indicators (CQI) are FT pre-coded control information on the PUSCH); 68:24-18 (testifying that demodulation reference signals (DMRS) and sounding reference signals (SRS) are control signals on the PUSCH)(Ex. 26); *see also* Mahon Decl. ¶ 4-6.

Samsung attacks Huawei's arguments by relying on claim construction principles.¹⁸ According to Samsung, the plain and ordinary meaning of "FT pre-coded symbols" is simply "symbols that contain information that have been FT pre-coded." Opp'n at 19. But, as explained above, in determining whether a reasonable juror could find that the plain and ordinary meaning of each disputed term reads onto the accused devices, I may consider the written description and other parts of the specification. *Aventis*, 715 F.3d at 1373. Samsung acknowledges that Dr. Prucnal's analysis identifies PUSCH symbols, which contain both data and control information. Opp'n at 20. But it insists that the claim term uses "comprising" and therefore does not foreclose the possibility that "FT pre-coded symbols" could contain control information.

Samsung also points out that construing the term as precluding control data excludes an embodiment depicted in figure 8. '105 patent at fig. 8; *see id.* at 9:14–17 ("In this embodiment, Size M FFT block 810 pre-codes not only the user data, but also FFT pre-codes some of the control and signaling information."). And it emphasizes that the claim term "FT pre-coded symbols" must be distinguished from "FT pre-coded data symbols" and "FT pre-coded control symbols."

Samsung's arguments are unpersuasive. The surrounding claim language makes it clear that the "*FT pre-coded symbols*" are generated by "*Fourier Transform (FT) pre-coding the non-FT pre-coded modulation data symbols*," which are generated by "modulating data information to generate non-FT precoded modulation data symbols." '105 Patent at 13:49-51. Accordingly, the FT pre-coded symbols are generated using data symbols.

The specification confirms that the term "FT pre-coded symbols" means "modulated data symbols that do not contain signaling or control information and have been put through a Fourier

¹⁸ As discussed below, it also moves to strike Huawei's argument because it argues that it was not timely disclosed. *See* discussion *infra* VII.

transform operation.” *E.g.*, ’105 Patent, Fig. 3 (distinguishing between “data” input and “signaling & control” input); 3:56-60 (describing figure 3); 6:65–67 (“In FIG. 3, the signaling and control information, such as pilot signals, are directly mapped to the OFDM subcarriers without FFT pre-coding.”); claim 28 at 13:45–51 (“modulating data information to generate non-FT precoded modulation data symbols; modulating control information to generate non-FT precoded modulation control symbols; Fourier Transform (FT) pre-coding the non-FT pre-coded modulation data symbols to generate FT pre-coded symbols...”).

As for figure 8, Huawei explains that the claim language discloses FT pre-coding using data information and therefore does not cover figure 8. “It is true that constructions that exclude the preferred embodiment are disfavored.” *Pacing Techs., LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1026 (Fed. Cir. 2015). “However, in a case such as this, where the patent describes multiple embodiments, every claim does not need to cover every embodiment.” *Id.* “This is particularly true where the plain language of a limitation of the claim does not appear to cover that embodiment.” *Id.* Such is the case here.

“Comprising is not a weasel word with which to abrogate claim limitations.” *Spectrum Int’l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1380 (Fed. Cir. 1998). “The presumption raised by the term ‘comprising’ does not reach into each of the six steps to render every word and phrase therein open-ended—especially where, as here, the patentee has narrowly defined the claim term it now seeks to have broadened.” *Dippin’ Dots, Inc. v. Mosey*, 476 F.3d 1337, 1343 (Fed. Cir. 2007); *see also Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1409 (Fed. Cir. 2004) (“‘Comprising,’ while permitting additional elements not required by a claim, does not remove the limitations that are present.”). The claim clearly recites that “FT pre-coded symbols” contain data information, not control information.

Samsung next highlights Dr. Prucnal’s testimony that “every symbol in the PUSCH does not necessarily include control information.” Prucnal Dep. at 64:22-65:5, 65:22-66:6 (Ex. 16). It underscores Huawei’s expert’s testimony that there are times when there is only data transmitted in the PUSCH. Mahon Dep. at 238:2-13, 239:5-13, 239:14-240:11, 241:20-242:7, 242:19-244:19 (Ex. 23). Huawei takes issue with this “eleventh-hour attempt” and emphasizes that Dr. Prucnal

never offered the opinion that the accused products only infringe some of the time nor did its interrogatory answers rely on such an infringement theory, and its damages expert assumes that the '105 patent is infringed at all times. Mot. Ex. 27 ¶ 362–77, 393–412; Reply Ex. 51 at 161–215; Stake FRAND Decl. Ex. 8 ¶¶ 76–79. And even if I ignored these oversights, Huawei urges that Samsung has still not met its burden to demonstrate a disputed issue because “[a] theoretical possibility that PUSCH symbols lack control data does not mean it happens.” Reply at 13.

But I must view the evidence in the light most favorable to Samsung. It has pointed to Dr. Prucnal’s testimony that not every PUSCH symbol contains control information, meaning that some contain data and no control information. Even accepting Huawei’s claim interpretation, Samsung has demonstrated disputed evidence of infringement. Its motion on this point is DENIED.

E. Noninfringement of the '825 Patent

The '825 patent provides a method for a user equipment to communicate with a base station (Node B) on a shared channel (SCH), which is a channel used by multiple UEs communicating with the same base station. '825 patent, Abstract; *id.* at 1:53–56 (Dkt. No. 140-1 at 47). The Node B must be able to differentiate UEs to ensure that data packets are sent to their intended recipient. The '825 patent discloses a method for UEs to select a temporary ID from a pool when initiating communications with a base station. Sometimes, two UEs may select the same short ID at the same time and a “collision” occurs. *Id.* at 2:14–39; *id.* at 6:47–49. The '825 patent addresses this potential problem by developing a monitoring technique in which a UE waits a “predetermined delay duration” prior to monitoring for a downlink signal, so that a first UE has time to receive its short ID before a second UE may intercept it. *Id.* at 3:33–45; *id.* at 6:34–39; *id.* at 6:65–7:7.

Asserted claims 1 (method) and 4 (apparatus) both disclose “receiving system information indicating a group of identification (ID)s.” '825 Patent at 11:43–44, 12:3–4. Huawei contends that “indicating” means “including,” whereas Samsung insists that “indicating” means “point out

or index.”¹⁹ Huawei highlights portions of the specification, which repeatedly notes that the system information *includes* information. The description of figure 3, “a message flow diagram illustrating conventional operation for acquiring a short ID after a UE moves to a new cell,” includes the following: “The system information is common information to be provided up to a cell boundary through known cell-by-cell channels, and includes information to be detected by the UE **305** for initiating communications in the cell.” ’825 Patent at 2:54–56, 59–63; *see also id.* at 5:32–33, figure 4 description (noting that the UE “acquires system information” and “[t]he system information includes the temporary ID pool of the cell A.”); *id.* at 7:52–57, figure 8 description (“[t]he controller **835**, for example, manages a temporary ID pool and T and P values acquired from system information of a current cell, selects a temporary ID from the temporary ID pool, and delivers the selected temporary ID to the control message generator **805**.”); *id.* at 8:51–52, figure 9 description (noting that the UE “acquires system information,” and “[t]he system information includes a temporary ID pool of the cell A, a delay duration T, and a valid period P.”).

Huawei underscores that Samsung’s expert, Dr. Matthew Valenti, admitted that this description means that the T and P values are what is being transmitted. Valenti Dep. at 95–96 (McBride Decl. ¶ 41; *id.*, Ex. 40; Dkt. No. 327-54[under seal]). It contends that Samsung has offered no evidence that the Huawei accused products receive system information including the group of IDs. *See* Valenti Report ¶¶ 371–74, 382, 396 (Ex. 41). And its expert, Dr. La Porta, opines that “[n]othing within this source code, or elsewhere, suggest that the Huawei/HiSilicon accused devices receive system information ‘including a group of identification(ID)s.’” La Porta Rebuttal Report ¶¶ 121, 132 (Ex. 42; Dkt. No. 327-56[under seal]). Dr. La Porta also contends that, even accepting Samsung’s proposed construction, the claims would not read on the accused products because “the system information only provides data for the UE to determine the size of PreambleGroupA and PreambleGroupB[,]” but “the base station does not provide any information to show which preamble group to use.” *Id.* ¶ 122.

Samsung begins its counterattack by insisting that “indicating” must be given its plain and

¹⁹ In the Joint Claim Construction Statement, Huawei proposed its preferred construction, but Samsung contended that the term needed no construction. Dkt. No. 124-3 at 58.

ordinary meaning, since it was not selected for claim construction, and the plain and ordinary meaning of the word can mean “to point out or point to.” Dkt. No. 328-41. It also emphasizes that all of the embodiments that Huawei highlights are “exemplary embodiments” and nowhere does the patentee use limiting language in reference to these embodiments. As evidence of infringement, it cites to Dr. Valenti’s opinion that “[t]he received system information determines the available groups of random access preambles (including whether preamble group B exist or not), the number of preambles in the available groups, and the size of each of those preamble groups.” Valenti Report ¶¶ 372, 624 (Dkt. No. 357-46[under seal]). According to Samsung, since the system information includes the number of preambles in a group, it necessarily includes the range of preamble indexes, i.e., an ID within a group of IDs, thereby accomplishing the claim limitation of “receiving system information indicating a group of identification (ID)s.” See ’825 Patent at 11:43–44, 12:3–4.

Even though I must look to the specification for guidance in interpreting the plain and ordinary meaning of claim terms, “it is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Epos Techs. Ltd. v. Pegasus Techs. Ltd.*, 766 F.3d 1338, 1341 (Fed. Cir. 2014) (quoting another source). I cannot say that there is such a “clear indication” here. Samsung cites to several references that do not state that the system information “includes” the temporary ID pool. *E.g.*, ’825 patent at 7:11–20 (referring to figure 7 and noting that the “UE acquires the temporary ID pool...”); *id.* at 9:56–65 (referring to figure 11 and noting the same).

Since “includes” must be given the “full range” of its plain and ordinary meaning, including “to point out,” and Samsung has provided evidence that the accused devices practice this limitation, Huawei’s motion for summary judgment on this point is DENIED.

Even if I did not find a genuine dispute of material fact as to literal infringement, I would deny the motion under a DOE theory. Dr. Valenti also opined that “any alleged differences are insubstantial[,]” so the limitation is at least practiced under DOE. Valenti Report ¶ 399; *see id.* (explaining that the accused devices perform substantially the same function, receiving

information indicating a group of identifiers, in substantially the same way, receiving the system information from the base station, to get substantially the same result, obtaining a group of identifications from which the UE can select). Viewing the evidence in the light most favorable to Samsung, it has demonstrated a disputed issue as to whether the accused products infringe under a DOE theory.

III. HUAWEI'S MOTION TO STRIKE PORTIONS OF SAMSUNG'S EXPERT REPORTS RELATED TO FRAND

Huawei objects to the opinions of two of Samsung's experts related to the propriety of an SEP holder seeking injunctive relief because it insists these opinions amount to improper legal conclusions. Mot. to Preclude at 2 (Dkt. No. 327-4[under seal]; Dkt. No. 329[redacted]).

Expert Michael Davies opines that “[i]f a patent holder holds patents of the type where there were a number of credible alternative implementations prior to a single implementation being selected for incorporation into the standard, the patent holder would be in violation of antitrust regulations by asking for an injunction.” Davies Report ¶ 27 (Peterson Decl., Ex. 1); *see also id.* (“A holder should not be granted an injunction on a patent ex-post if the patent was only one of a number of equally plausible alternatives ex-ante.”). And expert Dr. Jerry Hausman noted his “view” that “companies with SEPs should not be able to seek an injunction (or an exclusion order from the U.S. International Trade Commission) except under exceptional circumstances” because “they permit the SEP patent owner to exercise monopoly power beyond what is permitted under its FRAND obligations.” Hausman Report ¶ 57; *see also id.* ¶ 32 (“My review of the negotiations between the parties leads me to the conclusion that, to the extent there are any exceptions to the general rule that a SEP owner cannot pursue injunctive relief, those exceptions do not apply here.”), ¶ 56 (“Thus, by seeking an injunction Huawei is seeking to exploit its market power and obtain higher royalties. These higher royalties are equivalent to higher prices than would have occurred in the absence of the injunction and are thus a violation of Section 2.”), ¶ 58 (“Filing for injunctions also should not be permitted because they confer a ‘dangerous probability of success’ for the SEP owner to exercise monopoly power beyond what is permitted under its FRAND obligations.”); Hausman Rebuttal Report ¶ 14.

Huawei cites several reasons for striking these paragraphs. As to the Davies Report, Huawei contends that (1) his opinions on the legal standard for an antitrust violation and the propriety of injunctive relief are pure issues of law, (2) he did not rely on these statements as legal assumptions provided by counsel and he admits he is not qualified to opine as an expert in antitrust law or economics, and (3) he misstates the law because there is no per se rule against injunctions on SEPs and the appropriate antitrust laws will be set forth in the jury instructions. Mot. at 2–4. And with respect to Dr. Hausman, Huawei asserts that (1) his personal “view” constitutes a legal conclusion and will be of no use to the jury, (2) he acknowledges that his personal views do not align with prevailing legal standards, (3) his conclusion in paragraph 56 amounts to an improper and unfounded legal conclusion, and (4) “his opinions run afoul of the act of state doctrine, for the reasons set forth in Huawei’s motion for summary judgment.” *Id.* at 4–5.

Samsung responds that none of the paragraphs should be stricken because “an expert may offer his opinions within the legal terminology of the legal framework pertinent to his opinions.” Opp’n at 2. The Ninth Circuit has noted that “a witness may refer to the law in expressing an opinion without that reference rendering the testimony inadmissible. Indeed, a witness may properly be called upon to aid the jury in understanding the facts in evidence even though reference to those facts is couched in legal terms.” *Hangerter v. Provident Life & Acc. Ins. Co.*, 373 F.3d 998, 1017 (9th Cir. 2004) (quoting another source); *see also Fid. Nat. Fin., Inc. v. Nat’l Union Fire Ins. Co. of Pittsburg, PA*, 2014 WL 1286392, at *9 (S.D. Cal. Mar. 28, 2014) (allowing expert opinions “couched ... in legal terms” but noting that the court may revisit the issue in the context of specific testimony via a motion in limine); *Advanced Thermal Scis. Corp v. Applied Materials Inc.*, 2009 WL 10673194, at *1 (C.D. Cal. Oct. 28, 2009) (“The analysis of complex facts, albeit within a legal framework, is a proper role for an expert.”).

But Samsung overlooks the portions of the reports that go beyond providing a legal framework and offer opinions on legal conclusions. *See* Davies Report ¶ 27 (“the patent holder would be in violation of antitrust regulations”); Hausman Report ¶ 32 (“to the extent there are any exceptions to the general rule that a SEP owner cannot pursue injunctive relief, those exceptions do not apply here.”), ¶ 56 (“These higher royalties are equivalent to higher prices than would have

occurred in the absence of the injunction and are thus a violation of Section 2.”), ¶ 57 (“companies with SEPs should not be able to seek an injunction ... because they permit the SEP patent owner to exercise monopoly power beyond what is permitted under its FRAND obligations.”), ¶ 58 (“Filing for injunctions also should not be permitted because they confer a ‘dangerous probability of success’ for the SEP owner to exercise monopoly power beyond what is permitted under its FRAND obligations.”). These sentences will be struck.²⁰ See *Hangerter*, 373 F.3d at 1016 (“[A]n expert witness cannot give an opinion as to her *legal conclusion*, i.e., an opinion on an ultimate issue of law.” (quoting another source) (emphasis in original)).

I do not, however, see any need to strike paragraphs 21 through 26 of the Davies Report, paragraph 14 of Hausman’s Rebuttal Report, or the remaining portions of the paragraphs noted above.²¹

IV. HUAWEI’S *DAUBERT* MOTION ON TECHNICAL ISSUES²²

Huawei contends that Samsung’s experts offer opinions based on improper constructions of terms in Huawei patents 8,724,613 (“‘613 patent”), 8,885,587 (“‘587 patent”), 8,644,239 (“‘239 patent”), and 8,416,892 (“‘892 patent”), and Samsung patents RE44,105 (“‘105 patent”), 8,761,130 (“‘130 patent”), 9,288,825 (“‘825 patent”), and 8,619,726 (“‘726 patent”). Huawei *Daubert* Mot. (Dkt. No. 327-4[under seal]; Dkt. No. 330[redacted]). Huawei contends that Samsung’s expert witnesses offer opinions based on improper construction of claims not included in the Claim Construction Order. And it underscores that in many instances Samsung did not raise these issues in the Joint Claim Construction Statement (Dkt. No. 124). See *supra* note 5.

²⁰ This ruling is not inconsistent with any rulings on Samsung’s motion to exclude portions of Huawei’s experts’ reports because “the outcome depends upon how the expert expresses his opinion.” *Fid. Nat. Fin., Inc. v. Nat’l Union Fire Ins. Co. of Pittsburgh, PA*, No. 09-CV-140-GPC-KSC, 2014 WL 1286392, at *8 (S.D. Cal. Mar. 28, 2014).

²¹ To the extent that any of these opinions are based on incorrect legal assumptions or propose views that diverge from the actual law, as Huawei asserts, those opinions may be excluded via motions *in limine*. See *Villalpando v. Exel Direct Inc.*, 161 F. Supp. 3d 873, 895 (N.D. Cal. 2016)(addressing motions in limine and noting that “an expert’s reliance on *incorrect* legal assumptions would warrant exclusion[.]”).

²² Samsung moves to strike a number of Huawei’s noninfringement theories and noninfringement alternatives on the basis that they were not timely disclosed, and some of those arguments are implicated here. As discussed below, see discussion *infra* section VII, I am denying that motion.

A. Huawei's '613 Patent

1. Background

The '613 patent enables mobile devices to know when and where to locate a service when a base station transmits it within a specific transmission unit, a fixed block of time called a radio frame. '613 at 5:10–51 (Dkt. No. 330-4). Each frame consists of 10 subframes. *Id.*, figure 4.

Claim 1 provides,

A method for communicating, comprising:

receiving, by a user equipment (UE), a service sent by a base station, the service being sent in one or more subframes that are designated as specific subframes, the specific subframes being selected from one or more radio frames that are designated as specific radio frames, the specific radio frames being selected from a time unit, wherein the time unit comprises $2M$ radio frames, each of the radio frames containing a number R of subframes that can be allocated to carry the service, where R is a natural number, and M is a nonnegative integer; and

receiving, by the UE, position information of the specific radio frames in the time unit and position information of the specific subframes in the specific radio frame on a transport channel, wherein the transport channel is mapped to a physical shared data channel;

wherein the position information of the specific radio frames in the time unit is represented by the number of the specific radio frames in the time unit; or the position information of the specific radio frames in the time unit is represented by an interval between two specific radio frames in the time unit,

wherein the interval is $2m$, and $OsmsM$, or wherein the interval is the total number of the radio frames in the time unit divided by the number of the specific radio frames in the time unit.

'613 Patent at 18:24 – 49; *see also id.* at 18:60 – 19:18 (apparatus claim 5).

During the claim construction process, the parties selected only one of the '613 patent terms for construction—“receiving by a user equipment (UE), a service sent by a base station”/“receive a service sent by a base station” ('613 Patent, claims 1 and 5). I decided that no construction was necessary. Claim Construction Order at 9–11.

Samsung's expert, Dr. David Lyon, submitted a rebuttal report on noninfringement of the '613 patent in which he offered his opinion of noninfringement. Lyon '613 Noninfringement Rebuttal Report (Ex. 2, Dkt. No. 327-10[under seal]; Ex. A, Dkt. No. 355-7[under seal]). Huawei argues that Lyon's opinions are based on three new claim constructions not raised during the claim construction phase:

(1) the “position information” of claims 1 and 5 must be the “position information for the specific frames and subframes that contain the service[.]” rather than position information for frames and subframes that are “reserved” to carry the service (Lyon ’613 Noninfringement Report ¶ 82)

(2) claims 1 and 5 “do not provide a mechanism for representing the position of the first specific frame in the time unit to be anywhere other than the first frame of the time unit—a non-zero offset. In other words, the asserted claims do not allow there to be an ‘offset’ of frames in addition to the regular spacing of the specific frames within the time unit.” (Lyon ’613 Noninfringement Report ¶ 171), and

(3) “[t]he majority of the claimed limitations require performance in the network, not the UE” (Lyon ’613 Noninfringement Report ¶ 188), and “Dr. Akl needed to show that Samsung controlled the network to perform these limitations to such a degree that their actions could be imputed to Samsung” (Lyon ’613 Noninfringement Report ¶ 190).

2. Analysis

As an initial matter, Samsung misconstrues Huawei’s arguments. Huawei is not arguing that Dr. Lyon is “applying a different plain and ordinary meaning of claim terms than Huawei’s experts[.]” Opp’n at 2. Rather, Huawei contends that Dr. Lyon’s opinions “exceed the bounds” of the plain and ordinary meaning of the claim terms, *Apple*, 2014 WL 660857, at *6, thereby “delv[ing] too deeply into claim construction to be presented to the jury[.]” *Fujifilm*, 2015 WL 1265009, at *6. Under these circumstances, expert opinions are properly excluded and need not be included in a summary judgment motion. *E.g.*, *Media Tek*, 2014 WL 971765, at *5 (rejecting argument that expert was “merely offering testimony within the purview of the plain and ordinary meaning of the patent claim terms” when the expert “relies heavily on the prosecution history, specifications, and even provisional applications to explain and expound upon a specific meaning and/or requirements of the terms identified.”).

a. “Position Information”

The parties dispute whether the plain and ordinary meaning of “position information” allows for an interpretation limiting it to the “specific radio frames” that contain “specific

subframes” that *actually* contain the “service” sent by the base station, as opposed to whether the “position information” can refer to all “specific radio frames” and “specific subframes” that are reserved for the service, but may not necessarily contain it. Huawei contends that Dr. Lyon’s opinions based on “position information” find no support in the intrinsic evidence and should be stricken. *See* Huawei’s *Daubert* Mot. at 5 (seeking to strike paragraphs 28, 59, 64, 67, 71, 81-82, 120-21, 141-43, 153, 159, and 161). Samsung insists that Dr. Lyon does not provide any claim construction analysis of the term “position information,” he merely relies on his understanding of the plain and ordinary meaning of the term. Opp’n at 3; *see* Lyon ’613 Rebuttal Report ¶¶ 35–36.

But Dr. Lyon’s bare assertion that he “applied the plain and ordinary meaning” does not make it so. And he need not include paragraphs “delv[ing] deeply” into construction for his opinions to be improperly based on claim construction arguments. A brief examination of the claims and his opinions proves the point.

Part of claim 1 requires, “the service being sent in one or more subframes that are designated as specific subframes, the specific subframes being selected from one or more radio frames that are designated as specific radio frames,” ’166 Patent at 18:28–29, and another part mandates that the UE receive “position information of the specific radio frames in the time unit and position information of the specific subframes in the specific radio frame on a transport channel,” *id.* at 18:35–37. A proper reading of these claim elements requires that the UE receive a “service” that is “sent in one or more” designated “specific subframes,” which are selected from designated “specific radio frames,” and the UE receives “position information” for those designated “specific radio frames.”

Huawei frames this as an issue over the construction of “position information,” and (in reply) argues that “[t]he plain meaning of ‘position information’ is information relating to its position.” Reply at 2. But it appears that the parties actually dispute the meaning of the “specific radio frames” and “specific subframes,” and whether those “specific” frames/subframes must contain the service. The claims do not require this limitation. The service is “sent in” “one or more ... specific subframes” that are “selected from one or more ... specific radio frames... .” The “one or more” language suggests that not all of the “specific” frames/subframes have to carry

the service.²³ As Huawei frames it, contrary to Dr. Lyon’s opinion, “[n]othing in the plain language of the claims requires that all of the ‘designated’ frames and subframes actually contain the service, such that there is an exact one-to-one correspondence between the designated frames/subframes and the frames/subframes that actually contain the service[.]” Huawei’s *Daubert* Mot. at 3.

Portions of the targeted paragraphs of Dr. Lyon’s report depend on his interpretation that the claims dictate *limiting* the “position information” to those “specific frames and subframes that contain the claimed service.” Lyon Report ¶¶ 59, 64, 67, 81–82, 120, 141–42, 159, 161; *see also id.* ¶¶ 28, 71, 153 (implying the same). The take-away is that his opinions seek to *narrow* the plain and ordinary meaning of the claim language.²⁴ But claim terms are given their full scope absent disavowal by the patentee or a clear intent to act as his own lexicographer. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012); *see also 3M Innovative Properties Co. v. Tredegar Corp.*, 725 F.3d 1315, 1329 (Fed. Cir. 2013) (“[O]ur cases do not support prescribing a more particularized meaning unless a narrower construction is required by the specification or prosecution history.”). Because claim construction is a matter of law to be decided by the court, and, by implication, experts are not permitted to argue claim construction to the jury, an expert’s opinion that seeks to limit the full scope of a term’s plain and ordinary meaning must be stricken.

Samsung underscores the undisputed purpose of the ’613 patent, which is to “save electric energy of the user equipment[.]” ’613 patent at 3:53–54, to argue that “it would not make any sense for the UE to read frames and subframes that only might carry the service[.]” Opp’n at 5.

²³ This conclusion is confirmed by the specification, which notes that the invention discloses “[a] method for transmitting service [that] includes: selecting a part or all of radio frames in one time unit as specific radio frames; selecting a part of all of subframes in the specific radio frames as specific subframes for sending a specific service; sending the service according to the above time division multiplexing mode; and sending position information of the specific radio frames and/or position information of the specific subframes.” ’613 Patent at 2:63–3:3.

²⁴ The “exceed the bounds” language of *Apple*, see 2014 WL 660857, at *6, may cause confusion because one could interpret a more narrow interpretation as *falling within the bounds* of plain and ordinary, rather than “exceed[ing]” them. But, as explained, an improperly narrow construction technically falling within the bounds of a plain and ordinary meaning would still inappropriately delve too deep into claim construction.

1 But directing the UE to read certain reserved subframes as opposed to all subframes would still
2 accomplish this purpose. Moreover, the argument is irrelevant to whether Dr. Lyon’s opinions
3 limit the plain and ordinary meaning of the claim terms.

4 During the hearing, Samsung argued that Huawei’s request to strike certain paragraphs was
5 overly broad because it included portions that did not run afoul of claim construction tenets. It
6 provided a copy of the report with highlighted portions involving Dr. Lyon’s opinion that
7 “position information” is limited to position information of the specific radio frames and specific
8 subframes that actually contain the service. Highlighted Lyon Report (Ducca Decl., Ex. A, Dkt.
9 No. 396-5[under seal]); *see* Notice Re: Tentative Rulings (Dkt. No. 396-3[under seal]). The
10 highlighted sentences of the targeted paragraphs (last sentences of paragraph 64, 67, 71, 81, 82,
11 141, 159) will be struck. The remaining technical information is not tied to an improper limitation
12 of the claim language and may remain.

13 3. “Non-Zero Offset”

14 Huawei seeks to strike paragraphs 171 through 175 of Dr. Lyon’s report because he
15 explicitly opines that “[t]he claims do not provide a mechanism for representing the position of the
16 first specific frame in the time unit to be anywhere other than the first frame of the time unit—a
17 non-zero offset.” Lyon Report ¶ 171; *see also* ¶¶ 173–175 (detailing “an example where a non-
18 zero offset would not infringe the asserted claims...”). But, according to Huawei, nothing in the
19 claim language requires a specific starting position, let alone a “non-zero” starting position.
20 Huawei’s *Daubert* Mot. at 6. It also cites numerous locations in the specification that dictate the
21 permissive instruction that “the starting position *may* be appointed as 0[.]” *E.g.*, ’613 patent at
22 13:57, *id.* at 14:14–15, *id.* at 14:22 (emphasis added); *see also id.* at 14:26 (“the position may be a
23 first radio frame in the sub-time unit.”). And it emphasizes that the specification’s use of a
24 variable (g_0) rather than a constant to represent the starting position reinforces that it need not
25 always be 0.

26 Samsung counters that every embodiment of the specification uses a starting position of
27 zero. Opp’n at 6. This is true, but it does not justify limiting a claim’s plain and ordinary meaning
28 absent disavowal or a clear intent to define. *See Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*,

34 F.3d 1048, 1054 (Fed. Cir. 1994) (“[A]lthough the specifications may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments.”). That is what Dr. Lyon does when he opines, “The claims do not provide a mechanism for representing the position of the first specific frame in the time unit to be anywhere other than the first frame of the time unit—a non-zero offset.” Lyon Report ¶ 171. This sentence, and the sentences before and after it, must be struck.

I do not, however, see a need to strike the remaining portions of this paragraph, nor the other paragraphs Huawei seeks to strike. Those paragraphs explain Dr. Lyon’s opinion that “[w]hen there is a non-zero offset, the Accused Products do not infringe the asserted claims.” Lyon Report ¶ 171. He can opine on this issue, but he cannot argue that *the claims require* a non-zero offset.

4. Divided Infringement

Dr. Lyon opined that “network components are necessary to infringe claims 1 [method] and 5 [product]” of the ’613 patent, including that “the majority of the claimed limitations require performance in the network, not the UE[,]” and in order to show infringement, Huawei needed to demonstrate that “Samsung controlled the network to perform these limitations to such a degree that their actions could be imputed to Samsung.” Lyon Report ¶¶ 188–190. Huawei argues that Dr. Lyon’s divided infringement theory “fails as a matter of law.”

Dr. Lyon’s opinions here do not rely on improper claim constructions, but they depend on incorrect statements of the law and are therefore excludable under Rule 702 because they will not help the trier of fact understand the evidence. *See* Fed. R. Evid. 702; *see also Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1306 (Fed. Cir. 2011) (“Under *Daubert*, the district court must exercise its ‘gatekeeper’ function in ensuring that scientific testimony is relevant and reliable.”) (citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999)). Both claims 1 and 5 are directed to the “user equipment.” *See* ’613 patent, claim 1 at (“A method for communicating, comprising: receiving, by a user equipment (UE)... receiving, by the UE, ...”); *id.*, claim 5 at (“A user equipment, comprising ...”).

As an initial matter, his divided infringement theory does not apply to product or apparatus claims, such as claim 5 of the '613 patent, so it fails as a matter of law. *See Georgetown Rail Equip. Co. v. Holland L.P.*, No. 6:13-CV-366, 2016 WL 3346084, at *15 (E.D. Tex. June 16, 2016), *aff'd*, 867 F.3d 1229 (Fed. Cir. 2017) ("Holland's position was wrong as a matter of law, because the asserted claim 16 is a *system* claim and the law of divided infringement that Holland relied on applies only to *method* claims." (citing *Akamai Techs., Inc v. Limelight Networks, Inc.*, 786 F.3d 899, 910 (Fed. Cir. 2015) (panel decision) ("[O]nly method claims can raise an issue of divided infringement") *vacated Akamai Techs., Inc v. Limelight Networks, Inc.*, 786 F.3d 899, 910 (Fed. Cir. Aug. 13, 2015) (en banc)); *see also Arcelormittal & Arcelormittal Atlantique Et Lorraine v. AK Steel Corp.*, No. CV 13-685-SLR, 2017 WL 239344, at *4 (D. Del. Jan. 19, 2017) ("Plaintiffs' request for discovery is unnecessary given that divided infringement applies to method claims in particular circumstances, not to the product by process claims at bar." (citing *Akamai Techs., Inc v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2015))). Since divided infringement only applies to method claims, Dr. Lyon's divided infringement opinion with respect to apparatus claim 5 is irrelevant to the issue of infringement of that claim.

But as for method claim 1, I cannot say that Dr. Lyon's divided infringement theory fails as a matter of law. The claim is undeniably directed towards the "user equipment." "[A] patentee can usually structure a claim to capture infringement by a single party, by focusing on one entity." *Uniloc USA*, 632 F.3d at 1309 (internal quotation marks and alterations omitted); *see also Tech. Patents LLC v. T-Mobile (UK) Ltd.*, 700 F.3d 482, 501 (Fed. Cir. 2012) (finding divided infringement theory inapplicable because the claim "require[d] action only by the originating user," and "do not require performance by multiple actors."). The patentee elected to direct the claims of the '613 patent towards the "user equipment." But claim 1 also requires other actors in the network, such as a "service sent by a base station." *E.g.*, '613 patent at 18:25–26.

As the *Uniloc* court noted, "[t]hat other parties are necessary to complete the environment in which the claimed element functions does not *necessarily* divide the infringement between the necessary parties." 632 F.3d at 1309 (emphasis added). But this claim explicitly requires action by a third party, not implicitly as in the example provided by *Uniloc*. *See id.* (noting that a claim

that provides “[a]n algorithm incorporating means for receiving e-mails’ may require two parties to function, but could nevertheless be infringed by the single party who uses an algorithm that receives e-mails.”). Under these circumstances, I am not prepared to strike Dr. Lyon’s divided infringement opinion related to claim 1 of the ’613 patent. If it is determined pre-trial that divided infringement is not an applicable theory of infringement for this claim, then Huawei may move to exclude these opinions via a motion *in limine*.²⁵

B. Huawei’s ’587 Patent

Huawei attacks paragraphs 134 through 136, which pertain to the ’587 patent, because they present the same type of divided infringement opinions as discussed above with respect to the ’613 patent. *See* Lyon Report re: Noninfringement of ’587 Patent ¶ 134 (“the majority of the claimed limitations [in claims 3 and 9 of the ’587 patent] require performance in the network, not the UE.”) (McBride Decl. ISO Huawei’s *Daubert* Mot. ¶ 9; *id.*, Ex. 8, Dkt. No. 327-12); *id.* ¶ 136 (“Dr. Akl [Huawei’s technical expert] needed to show that Samsung controlled the network to perform these limitations to such a degree that their actions could be imputed to Samsung.”).

It presents the same arguments—that Samsung has not shown that a divided infringement theory applies to apparatus/product claims (as in claim 9 of the ’587 patent), and, regardless, the claims are written from the perspective of the UE, so divided infringement is inapplicable. *See* Huawei’s *Daubert* Mot. at 9–10.

As with the ’613 patent, the portions of these opinions that reference claim 9 will be stricken, because divided infringement does not apply as a matter of law to product/apparatus claims. But the remaining portions of the paragraphs can remain, unless and until it is determined that divided infringement does not apply to the method claims at issue in this case. *See* discussion above re: ’613 patent.

²⁵ This conclusion is reinforced by the conditional language in Dr. Lyon’s report. *See* Lyon Report ¶ 190 (“[T]o the extent there is a determination that the asserted claims require multiple actors to infringe the claims, Dr. Akl and Huawei have not set forth evidence to show that Samsung had any control over the third party network entities, and therefore, the Accused Products would not infringe the asserted claims.”).

C. Samsung's '105 Patent

The '105 patent provides “a mechanism for FFT [Fast Fourier Transform] pre-coding of data to reduce peak-to-average power ration (PAPR) in a multi-carrier wireless network[.]” ’105 patent at 1:38–40 (Dkt. No. 328-47), subject to certain protocol, such as “orthogonal frequency division multiplexing (OFDM),” or “orthogonal frequency division multiple access (OFDMA)[.]” *id.* at 1:43, 50–51. Asserted claim 28 requires, “mapping the FT pre-coded symbols to a first set of subcarriers[.]” and “mapping the non-FT pre-coded modulation control symbols to a second set of subcarriers[.]” *Id.* at 13:52–55. And, “performing an inverse Fourier Transform (IFT) operation on at least one of (i) the FT pre-coded symbols based on the first set of subcarriers and (ii) the non-FT pre-coded modulation control symbols based on the second set of subcarriers to generate an output signal... .” *Id.* at 13:56–60.

Huawei points to figure 3 of the patent to argue that “the OFDM/OFDMA transmitter according to the '105 Patent performs Fourier transform (FFT or FT) precoding on only the data symbols before the symbols are converted into the time domain signals via IFFT (or IFT).” Huawei *Daubert* Mot. at 10 (citing Min Expert Report ¶ 157). Dr. Prucnal opines that the “first set of subcarriers” corresponds to the physical uplink shared channel (PUSCH) and the “second set of subcarriers” corresponds to the physical uplink control channel (PUCCH). Prucnal Report ¶¶ 416, 432 (Ex. 11, Dkt. No. 327-14[under seal]). From this premise, Huawei argues that Dr. Prucnal’s opinion “contradicts the claim and should be excluded” because it does not allow for both sets of subcarriers to be available for the same IFT operation (the operation that creates the transmission symbols), which it contends is required by the claims. Huawei *Daubert* Mot. at 11; *see* Mahon Decl. ¶ 4 (“In the LTE standard, the Physical Uplink Shared Channel (PUSCH) and Physical Uplink Control Channel (PUCCH) are allocated to separate subcarriers and are never transmitted at the same time.”) (citing LTE standard, TS 36.211 v.8.7.0, p. 16, attached as Ex. A)(Dkt. No. 328-44).

Huawei seeks to exclude Dr. Prucnal’s opinion related to these two claim limitations because it contends that they depend on an incorrect interpretation of the claim that “allow[s] separate IFT operations on the alleged control information and alleged data information, even

1 when the IFT operations are separated in time.” Huawei Daubert Mot. at 11–12 (citing Prucnal
2 Report ¶¶ 446–463). But Samsung counters that nothing in the plain language of the claims
3 requires that IFT is performed on *both sets* of subcarriers. Samsung is correct. The claim recites
4 “at least one” of the subcarriers, and the patent discloses embodiments in which two sets can
5 undergo different IFT operations at different times.²⁶ See ’105 patent at figures 9 and 10.

6 Huawei’s attempts to limit the claims to require both sets be available at the same time
7 reads out certain embodiments and impermissibly narrows the plain and ordinary meaning of the
8 claims. Its arguments do not provide a valid basis for striking portions of Dr. Prucnal’s report.

9 **D. Samsung’s ’130 Patent**

10 **1. “Mapping data information to remaining symbols”**

11 Huawei seeks to exclude certain opinions of Samsung’s expert, Dr. Nicholas Bambos,
12 because they purportedly “rel[y] on an improper construction of the phrase ‘mapping data
13 information to remaining symbols.’” Huawei *Daubert* Mot. at 13 (seeking to strike paragraphs
14 550 to 594). Huawei insists that “the claim language is unequivocal that the ‘data information’
15 goes into each and every symbol that does not hold the reference signal.” *Id.* at 12 (citing ’130
16 patent at figure 10). It then attacks Dr. Bambos’s opinion that the physical uplink shared channel
17 (PUSCH) satisfies this element of the claim because some of the symbols in the PUSCH carry a
18 sounding reference signal (SRS) and no data information, and therefore, the PUSCH cannot satisfy
19 this element. See Mahon Decl. ¶ 37 (citing LTE standard, TS 36.211, section 5.3.4).

20 But Dr. Bambos explains that “a majority (if not overwhelming majority) of the subframes
21 have no SRS in them,” Bambos Report ¶ 558, which, according to Samsung, “result[s] in each of
22 these subframes having mapped data information in each of the symbols in the slot except for the
23 middle symbol containing the DM RS.” Opp’n at 17. Huawei points out that Dr. Bambos
24 admitted at his deposition that as many as half of the subframes can carry SRS. Bambos Dep. at
25 52:5–53:8 (McBride Decl. ISO Reply to Daubert, Ex. 38). And it underscores that Dr. Bambos

26
27 ²⁶ In Reply, Huawei argues that “at least one of” includes both, as well as either.” Reply at 9. So,
28 in its estimation, since “[t]he claim recites only one IFT operation,” both sets must be available at
the same time. *Id.* This argument does not alter the conclusion that Huawei’s theory depends on a
limited interpretation of the claims.

never opined that the accused products infringe only some of the time. Reply at 14.

Huawei's challenge to Dr. Bambos's opinion is not based on an improper claim construction argument. It simply questions the soundness of his conclusions; these attacks can be presented at trial. *See Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1313 (Fed. Cir. 2014) ("In *Daubert*, . . . the focus 'must be solely on principles and methodology, not on the conclusions that they generate.'"); *Daubert v. Merrell Dow Pharms., Inc.*, 43 F.3d 1311, 1318 (9th Cir. 1995) ("[T]he test under *Daubert* is not the correctness of the expert's conclusions, but the soundness of his methodology.").

2. "CQI Information Being Multiplexed with the Data Information"

Claim 13 includes the following limitation,

transmitting the signal including the mapped data information, the mapped acknowledgement information, and the mapped reference signal,
wherein some of the data information is mapped to the first symbols which are directly adjacent to the middle symbol, and
wherein CQI information is multiplexed with the data information.

'130 patent at 8:38–45.

Huawei claims that Dr. Bambos's report asserts that every non-reference symbol in LTE contains CQI. Huawei's *Daubert* Mot. at 13 (citing Bambos Report ¶ 564, in which he opines on LTE standard, TS 36.211, section 5.3.4). And it argues that "[h]e is wrong[.]" and Dr. Prucnal, another one of Samsung's experts, even testified that Dr. Bambos was wrong. *Id.* (quoting Prucnal Dep. at 61:19–62:8).

Samsung contends that "Dr. Bambos never said any such thing[.]" and it cites Bambos's declaration submitted in support of Samsung's opposition to Huawei's motion for summary judgment in which Bambos explains that he was referring to a "generic example," but there is a specific case where no CQI is sent. Bambos Decl. ISO Opp'n to Huawei MSJ ¶ 16. And it cites to Huawei's own expert, Dr. Mark Mahon, who conceded during his deposition that there are situations where CQI may not appear in a particular slot. Mahon Dep. at 150:19–151:1; *id.* at 238:2–13.

Huawei has not provided a valid basis for excluding these portions of Bambos's report. To the extent Bambos's opinions are inconsistent with other evidence, Huawei may attack his

credibility. *See, e.g., Alaska Rent-A-Car, Inc. v. Avis Budget Grp., Inc.*, 738 F.3d 960, 969 (9th Cir. 2013) (“All of Avis's challenges to Alaska Rent–A–Car’s expert are colorable, but none go to admissibility. They amount to impeachment.”).

E. Huawei’s ’239 Patent

1. “Obtaining ... a group number k of a sequence group allocated by the system”

Asserted claim 6 provides “[a] method for processing sequences in a communication system, comprising: obtaining, by a cell or a base station or a user equipment, a group number k of a sequence group allocated by the system... .” ’239 patent at 25:1–5. Huawei selected the term “a group number k of a sequence group allocated by the system” for construction by the court. In the Claim Construction Order, I noted that the surrounding language and specification made it “clear that ‘a group number k’ is ‘obtain[ed]’ by being ‘allocated by the system.’” Claim Construction Order at 9. I construed the term as “a group number k allocated by the system, where the group number k identifies a sequence group and where the value k is the same throughout the claim.” *Id.*

Samsung’s expert, Dr. Vijay Madiseti, opined that “[t]he Accused Products do not practice this limitation” because “a person of ordinary skill in the art would understand that this claim limitation requires a mobile device *to actually receive* the group number k from the system (*i.e.*, from the base station or eNB) that allocates the group number to the mobile device.” Madiseti Report ¶ 65 (emphasis added) (Ex. 15, Dkt. No. 327-17 [under seal]). In opposition, Samsung reiterates this position. *See* Opp’n at 11 (“When the Court’s construction is read in combination with ‘obtaining’ from the asserted claims, a person of ordinary skill in the art would have understood that the group number k must itself be received from the system that allocated it.”); *id.* at 12 (“In order to obtain what the system allocates, the UE would have to receive the group number k from the system.”).

Huawei argues that Dr. Madiseti’s opinion seeks to narrow the definition of “obtain” to require the UE to “actually receive” the group number k from the system, rather than calculating the group number k from information received from the system. Huawei *Daubert* Mot. at 15. It highlights the specification, which provides that “[t]he transmitter and the receiver may obtain the

data through calculation in this way rather than store the data.” ’239 patent at 13:13–15; *id.* at 21:47–48. Samsung argues that these portions of the specification relate to the generated sequences that are computed using the group number *k*, not the claimed group number *k* itself. Opp’n at 12. Huawei obliquely acknowledges this, but insists that it provides an example of how the claims intend to use the word “obtain.” *See* Reply at 5 (“This contradicts Dr. Madisetti’s read of ‘obtaining’ as excluding ‘calculating,’ even if it is describing processing different data.”).

I agree with Huawei. Nothing in the claims requires that “obtaining” a “group number *k*” that is “allocated by the system” means that the UE actually receives the group number *k* from the system. Because Dr. Madisetti’s opinions rely on a construction of “obtaining” that is narrower than its plain and ordinary meaning in light of the specification, his opinions on the matter (paragraphs 64 and 65) must be excluded.²⁷

2. Claimed “sequence”

Claim 7 provides, “[t]he method of claim 6, wherein the sequences correspond to at least one of: Zadoff-Chu sequences and Gauss sequences.” ’239 patent at 25:24–26; *see also id.* at 26:34–36, claim 18 (“The sequence processing apparatus of claim 17, wherein the sequences correspond to at least one of: Zadoff Chu sequences and Gauss sequences.”).

Dr. Madisetti’s noninfringement opinions for these claims depend on his assertion that the sequences must be Zadoff-Chu or Gauss sequences. *See* Madisetti Report ¶¶ 92, 95. In other words, he interprets the claim language “correspond to” as requiring that the sequences “**actually be**” either Zadoff-Chu or Gauss sequences, not just a portion of one with additional numbers appended, as Samsung explains. Opp’n at 12–13. Huawei argues that this interpretation improperly limits the claim language and it seeks to have paragraphs 91 through 95 of his report stricken. Huawei *Daubert* Mot. at 16.

Samsung relies on the dictionary definition of “correspond” to argue that “[t]his definition makes clear that “correspond” involves more than just being “related to” a Zadoff-Chu sequence;

²⁷ The same result follows even if the dispute is framed around the “allocated by the system” language, as Samsung contends. As Huawei notes, “[t]he system could easily allocate the ‘group number *k*’ and then send data allowing the mobile to calculate it.” Reply at 5.

rather, it must be a Zadoff-Chu sequence because correspondence denotes an equivalence or sameness.” Opp’n at 13. It also contorts excerpts from the specification to support its position. *Id.* Contrary to Samsung’s position, however, the specification is careful to never describe those “desired sequences” that resulted from cyclic extension as “Zadoff-Chu sequences” precisely because the “desired sequences” do not have to be ZC sequences. *See* ’239 patent at 11:41–46 (“The sequences with a length of the maximum prime number less than the quantity of sub-carriers, namely, the Zadoff-Chu sequences corresponding to the lengths 31, 47 and 59, are selected, and the desired sequences are obtained through cyclic extension of such sequences.”).

Huawei explains that “correspond to” can describe a “connection” between two things, as is the case here, where “the generated sequences contain a ZC sequence plus the repetition of as much of that sequence as is necessary to complete the sequence.” Reply at 6; *see* Mathematics Definition of “Correspondence” (including definition of correspondence as a function) (McBride Decl. ISO Reply, Ex. 34, Dkt. No. 374-5). Samsung’s (and Dr. Madisetti’s) interpretation improperly reads out the “correspond to” language. *See, e.g., 3M Innovative Properties Co. v. Tredegar Corp.*, 725 F.3d 1315, 1325 (Fed. Cir. 2013) (agreeing with patentee that “the plain and ordinary meaning of the claim term supports a broad claim scope.”); *TI Grp. Auto. Sys. (N. Am.), Inc. v. VDO N. Am., L.L.C.*, 375 F.3d 1126, 1138 (Fed. Cir. 2004) (explaining patentee “is entitled to the full breadth of claim scope supported by the words of the claims and the written description.”). Accordingly, paragraphs 92 through 95 will be struck.

3. “Selecting ... n sequences”

Claims 6 and 17 also include the limitation “selecting ... n sequences from a candidate sequence collection...” ’239 patent at 25:6–7; *id.* at 26:19. Dr. Madisetti opines that the claim refers to “ ‘sequences’ (plural) so this would require the selection of more than one sequence per sub-group.” Madisetti Report ¶ 76; *see id.* (“One of ordinary skill in the art reading the claim language and the specification would understand that the selection of a *single* sequence ($v=0$ or $v=1$) would not meet this limitation.”) (emphasis in original).

Huawei argues that this interpretation is contrary to law, the surrounding claim language, and the specification. The Federal Circuit has “recognized that, in context, the plural can describe

a universe ranging from one to some higher number, rather than requiring more than one item.”
Versa Corp. v. Ag-Bag Int’l Ltd., 392 F.3d 1325, 1330 (Fed. Cir. 2004) (citing *Dayco Products, Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1328 (Fed. Cir. 2001)). Huawei points to an embodiment in the specification, in which “n is 1” to highlight that the specification provides the “context” necessary to find that the plural can include one. *See* ’239 patent at 9:9; *see also id.* at 19:26–34 (describing another embodiment where, “[p]referably, n is 1 . . .”).²⁸

Samsung unconvincingly attempts to distinguish *Versa* and separate the portions of the specification relied on by Huawei. But Dr. Madisetti cannot narrow the claim language when the specification supports a broader interpretation, and binding precedent dictates the same.

Paragraphs 76 and 77 will be struck.

F. Huawei’s ’892 Patent

The ’892 patent, titled “Method and Apparatus of Transmitting a Random Access Preamble,” reduces signal interference by cyclically shifting a RAP sequence with a particular “Zero Correlation Zone (ZCZ) length.” ’892 Patent at 9:28–12:24.

Claim 1 provides,

A method of facilitating communication in a mobile communication system, the method comprising:

selecting, by a user equipment (UE), a random access preamble from a set of random access preambles; and
 transmitting, by a UE, the selected random access preamble, wherein the set of random access preambles is provided with Zero Correlation Zones of length N_{CS-1} , where N_{CS} is a cyclic shift increment selected from a predefined set of cyclic shift increments, the pre-defined set including all of the following cyclic shift increments of 0, 13, 15, 18, 22, 26, 32, 38, 46, 59, 76, 93, 119, 167, 279, 419.

Id. at 9:29–41.

1. Ncs in the Claims

Dr. Madisetti opines that “[t]he accused products do not select a cyclic shift increment ‘from a pre-defined set of cyclic shift increments’” because “it is *the base station* that signals the cyclic shift increment to the UE in the NCS configuration value.” Madisetti Report ¶ 127

²⁸ In Reply, it also highlights dependent claim 8, which provides “[t]he method of claim 6, wherein n is a value from the group of values consisting of: one” ’239 patent at 25:27–28.

(emphasis in original). According to Huawei, “the claim does not require the UE select N_{CS} and can also cover the situation where the base station selects the N_{CS} value and sends it to the UE.” Huawei *Daubert* Mot. at 19. It seeks to strike paragraphs 116–121 of Dr. Madisetti’s report. *Id.*

Samsung’s and Dr. Madisetti’s interpretation of the claims once again reads in a limitation not present in the claim language. The claims do not require that “[t]his selection of the N_{CS} value connects back to the UE ‘select[ing] a random access preamble.’”

Dr. Madisetti opines that “the accused products do not ‘select[] ... a random access preamble’” because the mobile device receives certain parameters from the base station, including the cyclic shift N_{CS} . Madisetti Report ¶ 116; *see also id.* ¶¶ 117–121. The portions of his opinions that depend on this overly narrow interpretation are struck (paragraph 116, second to last sentence; paragraph 127, last sentence; and any other portions).

2. “A set of Random Access Preambles”

██████████ Madisetti Report ¶ 122. Huawei argues that the plain and ordinary meaning of “‘selecting ... a random access preamble from a set of random access preambles’ does not require storing the set of random access preambles on the UE.” Huawei *Daubert* Mot. at 19.

While I agree with Huawei, I am not certain that this provides a valid basis for striking the opinions in this instance. Dr. Madisetti is free to argue his perspective that the “set of random access preambles” is not stored anywhere, and Huawei can argue that the claims do not require the “set of random access preambles” to be stored anywhere.

G. Samsung’s ’825 Patent

The ’825 patent provides a method for a user equipment to communicate with a base station (Node B) on a shared channel (SCH), which is a channel used by multiple UEs communicating with the same base station. ’825 patent, Abstract; *id.* at 1:53–56 (Dkt. No. 140-1 at 47).

Claim 1 provides,

A method for performing random access in a user equipment (UE) of a mobile communication system, the method comprising:

1 receiving system information indicating a group of identification
 2 (ID)s;
 3 selecting an [sic] first ID from among the group of the IDs;
 4 transmitting a first uplink signal corresponding to the selected first ID
 5 for random access to a Node B;
 6 after the transmitting of the first uplink signal, waiting for a
 7 predetermined delay duration without checking a downlink
 8 channel;
 9 after the waiting for the predetermined delay duration, checking the
 10 downlink channel during a valid period;
 11 determining whether a downlink signal responding to the first uplink
 12 signal is received in the valid period, the downlink signal
 13 comprising a second ID and an UE-ID; and
 14 transmitting a second uplink signal using the UE-ID, if the downlink
 15 signal is received during the valid period and the second ID is equal
 16 to the first ID, wherein the valid period starts when the
 17 predetermined delay duration starting from transmission of the first
 18 uplink signal has terminated.

19 ‘825 patent at 11:39–62 (emphasis added to claim term).

20 Huawei contends that Dr. Valenti’s infringement opinions depend on construing “without
 21 checking a downlink channel” as “without checking a downlink channel for a specific message[.]”
 22 Huawei *Daubert* Mot. at 20–21 (citing Valenti ¶¶ 470, 483 and Valenti Dep. at 85: 23–86:3; *id.* at
 23 90:6–24). It insists that Valenti’s infringement theories are based on the accused products not
 24 monitoring for a specific message, rather than not monitoring at all, and, therefore, seek to
 25 “broaden the scope of the claim by rewriting a negative claim limitation to disclaim only one
 26 specific example... .” Huawei *Daubert* Mot. at 21. Huawei also insists that this theory was not
 27 previously disclosed.

28 But Huawei acknowledges that Valenti’s opinion only “implicitly construes” the claim
 language. Huawei’s *Daubert* Mot. at 20; *see also id.* at 21 (“Dr. Valenti’s implicit construction
 impermissibly broadens the scope of the asserted claims beyond to encompass UEs that check a
 downlink channel for only some, but not all, messages during the ‘predetermined delay
 duration.’”). Because he does not explicitly opine on an improper claim construction, I see no
 basis for striking his opinions. Samsung may argue that the claim limitations are not satisfied
 because the UEs do not monitor for a particular message, and Huawei can counter that the claims
 do not require checking the downlink channel for any particular message.

H. Huawei's '726 Patent

The '726 patent relates to a technique for providing Voice over Internet Protocol (VoIP), where a person's voice is converted into small data packets that are transmitted over the network using persistent resource allocation. '726 patent at 1:38–42 (Dkt. No. 140-1 at 23).

Claims 11 and 13 require “associating a HARQ process with the calculated HARQ process ID... .” According to Huawei, the “associating” element must have meaning and “requires some affirmative act of deterministically relating the calculated value with a HARQ process.” Huawei Daubert Mot. at 24–25. Huawei insists that Dr. Bambos's opinions “read[] out this claim element” and should be stricken. *Id.* at 23 (citing Bambos Report ¶¶ 837, 847, 855). Huawei's argument depends on construing “associating” in a particular way that is not explicitly required by the claim language. This portion of its motion is DENIED.

V. SAMSUNG'S MOTION FOR SUMMARY JUDGMENT

Samsung's motion for summary judgment attacks the validity and infringement of Huawei's '239 patent and '613 patent, and it seeks to preclude a prior art reference and a finding of inequitable conduct for its own '105 patent. *See generally* Samsung's MSJ (Dkt. No. 336[redacted]; Dkt. No. 333-2[under seal]). Huawei represents that it is not pursuing an inequitable conduct defense to Samsung's '105 patent, so that is no longer at issue in this case.

A. '239 Patent, Independent Claims 6 and 17, Dependent Claims 7 and 18

The '239 Patent, titled “Method and Apparatus for Allocating and Processing Sequences in Communication System,” aims to reduce cell interference. *Id.* Its claims focus on interference between cells, and creating sub-groups of highly correlated sequences, thereby preventing these sequences from appearing in other sequence groups, resulting in low correlation and low interference between subgroups. '239 Patent. Huawei's expert, Dr. Venugopal V. Veeravalli, opined that the Accused Samsung Products infringe the '239 patent by “grouping sequences that have certain common mathematical characteristics” so as to “take[] into account the interferences between sequences of different lengths.” Veeravalli Report ¶¶ 52, 78 (Mack Decl., Ex. B, Dkt. No. 333-9[under seal]). He also asserted infringement under the doctrine of equivalents.²⁹ *Id.* ¶

²⁹ Samsung has moved to strike assertions based on a DOE theory of infringement because

1 254.

2 Huawei asserts claims 6, 7, 17, and 18 of the '239 patent. I previously discussed
3 independent claims 6 and 17 in the context of Huawei's *Daubert* Motion. *See supra* section IV.E.
4 As relevant here, they recite "obtain[ing] ... a group number k of a sequence group allocated by
5 [a/the] system." '239 patent at 25:3–5, *id.* at 26:17–18. During claim construction, I construed "a
6 group number k..." to mean "a group number k allocated by the system, where the group number
7 k identifies a sequence group and where the value k is the same throughout the claim." Claim
8 Construction Order at 7–9.

9 Claim 7 depends on independent claim 6 (method claims), and claim 18 depends on
10 independent claim 17 (apparatus claims). Claim 7 provides, "[t]he method of claim 6, wherein the
11 sequences correspond to at least one of: Zadoff-Chu sequences and Gauss sequences." '239 patent
12 at 25:24–26; *see also* 26:34–36 ("The sequence processing apparatus of claim 17, wherein the
13 sequences correspond to at least one of: Zadoff-Chu sequences and Gauss sequences.").

14 **1. Ineligible Subject Matter Under 35 U.S.C. § 101**

15 With the benefit of discovery, Samsung repeats its argument from nearly two years ago
16 that the claims are invalid because they claim ineligible subject matter.³⁰ Samsung's MSJ at 9–14.
17 Under Section 101 of the Patent Act, "Whoever invents or discovers any new and useful process,
18 machine, manufacture, or composition of matter, or any new and useful improvement thereof, may
19 obtain a patent therefor..." 35 U.S.C. § 101. The Supreme Court "has long held that this
20 provision contains an important implicit exception: Laws of nature, natural phenomena, and
21 abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354
22 (2014) (citing another source).

23 The *Alice* court applied the two-step framework articulated in *Mayo Collaborative Services*
24 *v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), to determine whether claims are patent

25 _____
26 Huawei did not disclose it in its Infringement Contentions. *See infra* section VII.E.

27 ³⁰ At the hearing on Samsung's motion to dismiss these patents because they claim ineligible
28 subject matter, Huawei argued that the court should have experts explaining the technology and
"that there could be an appropriate time" to decide the issue down the road. 10/26/16 Hr'g Tr. at
10–11 (Dkt. No. 96).

1 eligible. 134 S. Ct. at 2355. The court first ascertains whether the claims are directed to a patent-
2 ineligible concept, and if so, the court searches for an “inventive concept” to “transform the nature
3 of the claim” into patent-eligible subject matter. *Id.*

4 In the Order Denying Samsung’s MTD (“Prior Order”) (Dkt. No. 103), I accepted
5 Samsung’s argument that the asserted claims of the ’239 patent were directed to an abstract idea
6 akin to allocating or sorting, but found that they provided the requisite inventive concept because
7 they were tied to the concrete structure of mobile devices. *See id.* at 17–18. Samsung now
8 reiterates that the claims are directed to “the abstract idea of creating groups of numeric sequences
9 that are not highly correlated with each other[.]” Samsung’s MSJ at 11, and it insists that the
10 patent contains no inventive step. *Id.* at 12.

11 Samsung’s analysis does not provide clear and convincing evidence that the patent claims
12 ineligible subject matter. First, its “directed to” inquiry minimizes elements of the claims tying
13 the claimed innovations to the telecommunications systems that it purports to improve on the
14 grounds that those elements are “generic” and “high-level.” Samsung MSJ at 13. But “whether a
15 claim element or combination is well-understood, routine, and conventional ... falls under step
16 two in the § 101 framework, in which we ‘consider the elements of each claim both individually
17 and as an ordered combination to determine whether the additional elements transform the nature
18 of the claim into a patent eligible application.’” *Aatrix Software, Inc. v. Green Shades Software,*
19 *Inc.*, 890 F.3d 1354, 1359 (Fed. Cir. 2018) (internal quotation marks omitted). Next, the inquiry
20 must look at the claim as a whole, not as isolated elements, and determine whether it is directed to
21 a patent-ineligible concept, “it is not enough to merely identify a patent-ineligible concept
22 underlying the claims[.]” *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed.
23 Cir. 2016).

24 In Reply, Samsung cites the Prior Order as “holding” that the ’239 patent is directed to an
25 abstract idea under step one in an attempt to undermine Huawei’s arguments. That was not the
26 holding of the Prior Order. To the contrary, I “accept[ed]” Samsung’s argument that the claims
27 were directed to an abstract idea, in part because Huawei had offered no rebuttal, and proceeded to
28 step two, where I concluded that “the claims contain[ed] enough of an inventive concept to be

1 patent eligible, at least based on the allegations in the Complaint.” Prior Order at 17–18. The
 2 Prior Order does not bind me to finding that the patent is directed to an abstract idea; it is
 3 Samsung’s burden to prove that it is by clear and convincing evidence in order to move on to the
 4 second step.

5 But even if I accepted Samsung’s assertion that the patent is directed to an abstract idea,
 6 the claims contain an inventive step. Samsung relies on inventor Bingy Qu’s testimony that he did
 7 not invent the generation of reference signal sequences, Qu Dep. at 104:9–11, and Dr. Madiseti’s
 8 opinion that all of the non-mathematical equation elements of the asserted claims are disclosed by
 9 the prior art, Madiseti Report ¶ 142. But Samsung missteps in removing the mathematical
 10 equation elements of the asserted claims. *See Diamond v. Diehr*, 450 U.S. 175, 188 (1981) (“It is
 11 inappropriate to dissect the claims into old and new elements and then to ignore the presence of
 12 the old elements in the analysis.”). The *Diehr* court rejected petitioner’s argument that *Parker v.*
 13 *Flook*, 437 U.S. 584 (1978) (which Samsung relies on here), mandated that a “mathematical
 14 algorithm must be assumed to be within the ‘prior art’” and removed from the analysis in
 15 determining whether patent eligible subject matter is claimed. 450 U.S. at 189 n.12. The *Diehr*
 16 court concluded, “when a claim containing a mathematical formula implements or applies that
 17 formula in a structure or process which, when considered as a whole, is performing a function
 18 which the patent laws were designed to protect (*e. g.*, transforming or reducing an article to a
 19 different state or thing), then the claim satisfies the requirements of § 101.” *Id.* at 1059–60.

20 Samsung does not address this misstep in reply. *See Reply* at 7–8 (discussing *Diehr* and
 21 *Flook*). Instead, it repeats the mistake. *See id.* at 8 (“As explained in the Motion, only a couple of
 22 limitations at the end of those claims are not related to the claimed mathematical formula.”). But
 23 “[t]he mere fact that something is disclosed in a piece of prior art, for example, does not mean it
 24 was well-understood, routine, and conventional.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1369
 25 (Fed. Cir. 2018).

26 Huawei insists that the claims are directed towards an improvement to telecommunication
 27 networks. Samsung never addresses this point, but Huawei provides evidence in support of it.
 28 *E.g.*, Veeravelli Report ¶ 11 (“The ’239 Patent allows UEs to transmit reference signals to the cell

1 tower with reduced interference between the reference signals transmitted by different UEs
 2 connected to different cells. This reduced interference improves the cellular network by allowing
 3 the UEs to transmit reference signals that the base station is better able to distinguish as intended
 4 for it, as opposed to intended for nearby cells.”) (Mack Decl. ISO Samsung’s MSJ ¶ 4; *id.*, Ex. B,
 5 Dkt. No. 333-9). Samsung’s analysis fails to address the claims as a whole and ignores the
 6 patent’s disclosure of providing an improvement to telecommunication systems. *See Aatrix*
 7 *Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1127 (Fed. Cir. 2018) (“We have
 8 repeatedly held that inventions which are directed to improvements in the functioning and
 9 operation of the computer are patent eligible.”). It has not met its burden to demonstrate that the
 10 patent claims ineligible subject matter.

11 **2. Invalidity Under 35 U.S.C. § 112**

12 Samsung contends that the dependent claims’ reference to “the sequences” is ambiguous
 13 because the claims recite more than one set of sequences and it is impossible to know “the
 14 sequences” claimed, rendering the dependent claims indefinite under 35 U.S.C. § 112, ¶ 2.
 15 Samsung’s MSJ at 4.

16 “[A] patent is invalid for indefiniteness if its claims [under § 112, ¶ 2] read in light of the
 17 specification delineating the patent, and the prosecution history, fail to inform, with reasonable
 18 certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig*
 19 *Instruments, Inc.*, ___ U.S. ___, 134 S. Ct. 2120, 2124 (2014). “Some modicum of uncertainty” is
 20 allowed, but “a patent must be precise enough to afford clear notice of what is claimed, thereby
 21 ‘appris[ing] the public of what is still open to them.’” *Id.* at 2128–29 (internal quotation marks
 22 omitted). “Otherwise there would be ‘[a] zone of uncertainty which enterprise and
 23 experimentation may enter only at the risk of infringement claims.’” *Id.* at 2129.

24 Samsung insists that such a “zone of uncertainty” exists here, given the independent
 25 claims’ multiple references to “sequences.” Samsung MSJ at 5. According to Samsung, “[t]he
 26 plain language of claim 6 therefore requires at least three claimed sequences: the selected
 27 sequences, the formed sequences, and the generated, corresponding sequences.” *Id.* It emphasizes
 28 Dr. Veeravelli’s admission that there are “three” sequences recited in the claim. *See Veeravalli*

Rebuttal Report ¶ 94 (Mack Decl., Ex. D). But Huawei counters that a POSITA would understand that “the sequences” in the dependent claims refers back to the antecedent “corresponding sequences” in the independent claims. Huawei adds annotations and highlights to the claims to prove the point:

sequences in the form of a sequence of frequency resources corresponding to at least one of the sequences.

6E communicating, by the equipment, according to the frequency resources corresponding to at least one of the sequences.

7. The method of claim 1, wherein the sequences are generated, corresponding sequences of Samsung's list.

17D a sequence of frequency resources corresponding to at least one of the sequences.

17E a sequence of frequency resources corresponding to at least one of the sequences.

18. The method of claim 1, wherein the sequences are generated, corresponding sequences of Samsung's list.

I agree with Huawei. The dependent claims use of “the sequences” refers back to the immediately preceding use of “the sequences” in the independent claims (elements 6E and 17E in the figures), which in turn refers back to the immediately preceding use of “corresponding sequences” in elements 6D and 17D. This conclusion is bolstered by the fact that the claims only use “the sequences” three times in each, once in the dependent claims, once in the last element of the independent claims (6E and 17E), and once in the second to last element (6D and 17D). *See Fin Control Systems Pty, Ltd. v. OAM, Inc.*, 265 F.3d 1311, 1318 (Fed. Cir. 2001) (“[T]he same terms appearing in different portions of the claims should be given the same meaning unless it is clear from the specification and prosecution history that the terms have different meanings at different portions of the claims.”). And “the sequences” refers to the immediately preceding “generated, corresponding sequences” of Samsung’s list.³¹ The other references to sequences,

³¹ In Reply, Samsung focuses on the reference to “the sequences” in 6D and 17D, which Huawei ignores, to argue that “[t]his is just the type of confusion that shows indefiniteness inherent in the

which Samsung labels “selected sequences” and “formed sequences” do not use “the” to describe them, and are separated from “the sequences” by the “generated, corresponding sequences.” Samsung has not demonstrated by clear and convincing evidence that the structure of the claims provides the “reasonable certainty” necessary for a POSITA to understand their scope. *See Nautilus*, 134 S. Ct. at 2129.

3. Noninfringement

a. The Sequences of the Dependent Claims

Samsung argues that even if the claims are not indefinite because their reference to “the sequences” is ambiguous, it is entitled to summary judgment of noninfringement because “Huawei and its expert have not advanced any evidence that the alleged ‘corresponding’ sequences in the accused products ‘correspond to at least one of: Zadoff-Chu sequences and Gauss sequences,’ as required by asserted claims 7 and 18.” Samsung MSJ at 8.

But, as explained above in the discussion on Huawei’s *Daubert* motion, *see* section IV.E, Samsung’s argument depends on its misunderstanding that “the sequences” of the dependent claims *are actually* Zadoff-Chu sequences. *See id.* at 9 (“This extension is critical because Huawei’s expert has provided ***no evidence*** that these extended sequences—which correspond to the claimed ‘corresponding’ sequences that are then ‘communicated’ according to the claims—are themselves Zadoff-Chu sequences as required by asserted claims 7 and 18 (assuming the Court chooses to resolve the inherent ambiguity noted above).”). Huawei does not offer evidence that “the sequences” are actually ZC sequences because nothing in the claims or specification dictates this limitation. Samsung’s interpretation reads out the “correspond to” language of the claim, or at least narrowly interprets it to require equivalence as opposed to some other relationship, and must be rejected.

Huawei has at least offered disputed evidence that “the sequences” of the dependent claims “correspond to” Zadoff-Chu sequences. *See* Veeravalli Report ¶ 240 (explaining how the

asserted claims.” Reply at 3. But “the sequences” in 6D and 17D describe the “generated, corresponding sequences.” In other words, the reference does not detract from Huawei’s interpretation.

“reference signal sequence” is “defined by a cyclic shift...”). Samsung’s motion on this point is DENIED.

b. Group number k

Samsung also argues that it is entitled to a judgment of noninfringement because Dr. Veeravalli admitted that he used the value “u” for the claimed “group number k” in the “obtaining” step and “u + 1” for the “basic sequence r_i ” limitation, in contravention of the court’s construction of the term “group number k,” which dictates that the “value k is the same throughout the claim.” Samsung’s MSJ at 3. Huawei counters that it and its expert have “consistently mapped the value ‘u + 1’ in the LTE standard to the claimed ‘group number k.’” Opp’n at 2; *see* HW 239 Inf. Cont. at 5 (“The following terms in the claim are met as indicated by the LTE standard: . . . ‘Group number k of a sequence group’ = u+1.”)(Szczepanik Decl., Ex. 1); Veeravalli Report ¶ 253 (“In the LTE standard, the ‘group number k of a sequence group’ is ‘u+1,’ where u is determined as explained in the previous paragraph. The processing required by the LTE standard uses the same value of k, that is ‘u+1,’ throughout the processing that corresponds to this claim.”); Veeravalli Dep. at 136:10–14 (testifying that he only provided analysis where k equals u plus 1).

Huawei contends that Samsung’s argument is based on its misreading of paragraph 252 of the Veeravalli report, which explains how the Samsung products “obtain” a value for “u.” Opp’n at 2–3; *see* Veeravalli Report ¶ 252 (“The Infringing Samsung Products perform steps required by the LTE standard to obtain a value for ‘u,’ which is allocated by the system...”) (citing the LTE standard to explain how “u” is allocated by the system). Huawei’s opposition is careful to repeatedly use the word “acquire,” as opposed to “obtain,” even though Veeravalli used “obtain” in his report. This exposes the source of the confusion—the claims explicitly require “obtain[ing] . . . a group number k... .” Samsung seizes on Veeravalli’s use of “obtain” in connection with “u” to urge that Huawei’s infringement analysis depends on using both “u” and “u + 1” for “a group number k.” But this result is unnecessary.

Dr. Veeravalli never asserts that the value “u” represents the claimed “group number k.” As discussed above in the discussion on Huawei’s *Daubert* motion, *see supra* section IV.E, the plain and ordinary meaning of “obtain” will not be limited to “receive”; rather, “obtain” may mean

“calculate” in the context of these claims. But this does not entirely settle the issue. The claim construction dictates “a group number k allocated by the system, where the group number k identifies a sequence group and where the value k is the same throughout the claim.” Claim Construction Order at 7–9. Samsung’s *real* issue centers around the “allocated by the system” limitation. Dr. Veeravalli opined that the value “ u ” is “allocated by the system,” which explains Samsung’s attempt to assign “ u ” to “a group number k .” *See* Reply at 1 (“Because the only values ‘allocated’ by the system cited by Dr. Veeravalli are the values used to compute the ‘sequence-group number u ,’ the value ‘ u ’ must be the claimed ‘group number k ’ that is obtained by the UE.”).

What Samsung should have argued in its motion, but only developed in reply, is that Huawei has not offered evidence that “a group number k ” is “allocated by the system,” and therefore has not demonstrated disputed facts that the claim limitations are met by the accused products. *See* Reply at 2 (“Huawei presents no evidence that ‘ $u+1$ ’ is a value ‘allocated by the system’ that the UE obtains.”) (citing Veeravalli Report). Samsung insists that Huawei cannot present such evidence. *See, e.g.,* Marisetti Report ¶ 18 (“The UE never ‘obtains’ the value ‘ $u+1$ ’ at any point in time when generating reference signals; nor is the value ‘ $u+1$ ’ ever ‘allocated’ by the system, as required by the Court’s construction.”).

As with the “obtaining” limitation, Huawei contends that “allocated by the system” does not prohibit receiving precursors to the group number k from the system (i.e., the value “ u ”), and subsequently calculating the group number k (“ $u+1$ ”) from the precursor. It cites to the dictionary definition of “allocate” (which the parties apparently agree on) to support its position. Dictionary Definition of “allocate” (Mack Decl. ISO Samsung’s Opp’n to Huawei’s Daubert Mot. ¶ 5; *id.*, Ex. D, Dkt. No. 356-1)(“to set apart for a particular purpose; assign or allot”). I agree with Huawei that “allocated” should not be limited to “receiving” in the same way that “obtaining” is not limited to “receiving.” *See supra* discussion IV.E. In other words, Huawei can prove infringement by showing that the “group number k ” is allocated by the system because “ u ” is sent by the system, a necessary prerequisite to “allocating” “ $u+1$.” As Huawei put it during the hearing, Samsung concedes that “ u ” is “allocated by the system,” but insists that “ $u+1$ ” is not

1 allocated. I cannot say, that “no reasonable jury could determine two elements to be equivalent[.]”
2 *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39 n.8 (1997).

3 To answer Samsung’s charge that Huawei’s DOE theory was not adequately disclosed,
4 Huawei contends that Dr. Veeravalli’s DOE opinion was provided in response to Samsung’s
5 “cryptic” disclosure on the last day of discovery that “Huawei impermissibly redefines the group
6 number ‘k’ to be ‘u+1’ in the standard—but of course ‘u+1 is not the group number.” Samsung
7 March 9, 2018 Suppl. Resps. To Huawei Interrog. at 243 (Yang Decl., Ex. 3). That interrogatory
8 response never disclosed Samsung’s current assertion that “obtaining” cannot include calculating.
9 Since the claim language will not be interpreted to limit “obtaining” to “receiving,” *see supra*
10 section IV.E, I question whether the DOE theory remains relevant. But, as discussed below, I am
11 not striking these paragraphs as untimely. *See infra* section VII.E.

12 Samsung also argues that the DOE theory fails on the merits. Dr. Veeravalli opined that
13 the accused products infringe under the DOE because the “differences between using ‘u’ or ‘u+1’
14 for the group number k are insubstantial” because “the group number k corresponds to ‘u+1.’”
15 Veeravalli Report ¶ 254. But Samsung counters that the difference between the value “u” and the
16 value “u+1” is substantial because “[u]sing the value ‘u’ as the group number (as required by the
17 LTE standard) would result in a functioning UE that will be able to communicate with the base
18 stated (or eNB)[.]” whereas “[u]sing ‘u+1’ as the group number (as suggested by Dr. Veeravalli)
19 would result in an invalid uplink reference signal and incoherent signal demodulation at the base
20 station.” Madisetti Report ¶ 19; *see also id.* ¶¶ 15–19. The parties have presented competing
21 experts opining whether DOE provides a valid theory of infringement. Viewing the evidence in
22 the light most favorable to Huawei, I cannot rule as a matter of law that there is a substantial
23 difference between the value “u” and the value “u+1”—that will be up to the jury to decide.

24 **B. Noninfringement of ’613 Patent claims 1 and 5**

25 Claim 1 of the ’613 patent requires “receiving, by a user equipment (UE), a service by a
26 base station... .” ’613 patent at 18:25–26; *see also id.*, claim 5 at 18:61 – 62 (“receive a service
27 sent by a base station”). Huawei’s expert, Dr. Robert Akl, opined that Samsung’s accused devices
28

1 meet this limitation, and “[t]he service is, for example, the eMBMS service.”³² Akl Report ¶ 77
 2 (Mack Ex., Ex. I, Dkt. No. 333-21[under seal]). But Samsung contends that the accused devices
 3 [REDACTED] Samsung MSJ at 15 (citing experts
 4 Kim, Song, and Nam).

5 In response, Huawei highlights evidence that “Samsung witnesses deposed in this matter
 6 [REDACTED]
 7 [REDACTED] Akl Decl. ¶ 4a; *see* Song Dep. at 8:2–4,
 8 21:10–22:2 (testifying that “[REDACTED]
 9 [REDACTED]”);
 10 Kim Dep. at 21:24–22:7 (“With regards to eMBMS service, I know just approximately what that
 11 is, and [REDACTED].”). According to Huawei,
 12 “[v]erifying the feature by testing in the actual network requires receiving a service sent by a base
 13 station.” Akl Decl. ¶ 4a; *see also* Song Dep. at 35:25–36:4 (“[REDACTED]
 14 [REDACTED]”); *id.* at 36:5–13 (testifying that [REDACTED]
 15 [REDACTED]).

16 Huawei also highlights testing documents from official testing organizations certifying that
 17 [REDACTED]
 18 [REDACTED]. *See* Akl Decl. ¶ 4c. Samsung attacks this evidence because the test results [REDACTED]
 19 [REDACTED] Reply at 9; *see id.* at 10
 20 (“These test results [REDACTED] “receiving, by a user equipment
 21 (UE), a service sent by a base station, the service being sent in one or more subframes that are
 22 designated as specific subframes, the specific subframes being selected from one or more radio
 23 frames that are designated as specific radio frames, the specific radio frames being selected from a
 24 time unit.”). Samsung challenges Huawei’s other evidence on various grounds, but none of them
 25 expunge the evidence relied on by Huawei. Huawei’s evidence demonstrates a disputed fact of
 26 whether the accused devices receive the eMBMS service.

27
 28 ³² eMBMS is Evolved Multimedia Broadcast Multicast Service. Akl Report ¶ 68.

Huawei also points out, with respect to apparatus claim 5, that the user equipment need only be “configured to receive a service sent by a base station.” Samsung counters that the devices require middleware and user applications to meet this claim element. According to Samsung, Huawei has not offered any evidence that the accused products [REDACTED] [REDACTED] “it just assumes that these requirements are present to perform testing.” Reply at 12. But, as discussed above, the evidence is sufficient to demonstrate a genuine issue as to whether the accused products are configured to receive the service. *See Texas Advanced Optoelectronic Sols., Inc. v. Renesas Elecs. Am., Inc.*, 895 F.3d 1304, 1327 (Fed. Cir. 2018)(“Although infringement of the apparatus claims requires that Intersil’s products have the ability to perform in Mode 3, infringement does not require actual use of Intersil’s products in Mode 3.”); *Carucel Invs., L.P. v. Novatel Wireless, Inc.*, Case No.: 16-cv-118-H-KSC, 2017 WL 1394068, at *4 (S.D. Cal. Mar. 2, 2017) (denying motion for summary judgment of noninfringement of claims with “configured to” language, based in part on evidence that “designing and testing was undertaken to ensure that the accused products” could satisfy the claim element).

C. The ’105 Patent

1. Prior Art

Huawei and its expert, Dr. Mark Mahon, rely on an “earlier internal draft of 3GPP submission R1-050245” by Motorola (“the Motorola Draft”) to argue that Samsung’s l’105 patent is invalidated by prior art.

To invalidate a patent based on prior art under 35 U.S.C. § 102(g)(pre-AIA), “on a motion for summary judgment, a challenger of a patent must prove by clear and convincing evidence that the invention was made in this country by another inventor.” *Fox Grp., Inc. v. Cree, Inc.*, 700 F.3d 1300, 1304 (Fed. Cir. 2012) (internal quotation marks omitted). “Then, the burden shifts to the patentee to produce evidence sufficient to create a genuine issue of material fact as to whether the prior inventor has suppressed or concealed the invention.” *Id.* (internal quotation marks omitted). “Finally, the burden shifts again to the challenger who must rebut any alleged suppression or concealment with clear and convincing evidence to the contrary.” *Id.* (internal

quotation marks omitted).

“A challenger ... has two ways to prove that it was the prior inventor: (1) it reduced its invention to practice first ... or (2) it was the first party to conceive of the invention and then exercised reasonable diligence in reducing that invention to practice.” *Id.* (quoting another source)(alterations omitted). Dr. Mahon relies on the Motorola Draft as evidence of prior conception by Motorola, and he relies on the filing of U.S. Provisional Patent App. No. 60/759,683 (“the ’683 Provisional”) by Motorola as evidence of alleged reduction to practice. Mahon Invalidity Report at 46–51 (Ex. R).

Samsung argues that Huawei’s evidence of reduction to practice fails as a matter of law because the ’683 Provisional was abandoned, by statute, 12 months after it was filed.³³ *See* 35 U.S.C. § 111(b)(5). “It has long been settled, and we continue to approve the rule, that an abandoned application, with which no subsequent application was copending, cannot be considered a constructive reduction to practice.” *In re Costello*, 717 F.2d 1346, 1350 (Fed. Cir. 1983). In response, however, Huawei does not rely on the ’683 Provisional.

Instead, it cites to evidence of Motorola’s computer simulations as proof of reduction to practice of the Motorola Draft. *See* Mahon Decl. ¶¶ 5–7; *see also* Ghosh Dep. at 54:2-56:2, 74:22-75:7 (Szczepanik Decl., Ex. 11); Motorola Draft R1-050245 at 9-10 (Szczepanik Decl., Ex. 12). Dr. Ghosh, the creator of the Motorola Draft, testified that his team at Motorola “ran simulations using the software for each of the three options, OFDM, DFTS[-]OFDM, and IFDMA prior to giving this presentation [R1-050245].” Szczepanik Decl. Ex. 11, Ghosh Dep. 55:18-24. The simulations “show[ed] the bit error rate versus SNR for all these modulations and also these PAPR cubic metric comparison[s]” and “entail[ed] replicating these block diagrams [illustrated in Motorola Draft R1-050245], the transmitter and also the receiver, and running random bits through the simulation and through the channel to see what is the link performance.” *Id.* at 54:19-21, 55:6-9. The simulations were custom-designed by Motorola engineers and used the computer languages C, C++, and MATLAB. *Id.* at 55:10-17. The results of these simulations were

³³ Samsung does not contest Motorola’s conception of the Motorola Draft.

illustrated in the bar charts in Motorola Draft R1-050245. Szczepanik Decl. Ex. 11, Ghosh Dep. 55:25-56:2; Ex. 12, Motorola Draft R1-050245 at 9-10. Ghosh testified that it was Motorola's practice to "prove" the idea before submitting a patent application. Ghosh Dep. at 74:22-75:7.

Courts have found computer simulation sufficient evidence of reduction to practice. *Mosaid Techs. Inc. v. Samsung Elecs. Co.*, 362 F. Supp. 2d 526, 547–48 (D.N.J. 2005) ("But surely, in this technologically advanced society of ours, there are areas of science where a successfully run simulation represents the end of the inventive process and the construction of the physical embodiment is but a matter of mere routine and mechanical application. In that case, and only in that case, it seems appropriate that a simulation should be a valid reduction to practice."). In reply, Samsung emphasizes that this computer simulation theory is new and was not disclosed in Huawei's invalidity contentions or expert reports. Reply at 13; *see* Exhibit C-9 to Huawei's First Supplemental Invalidity Contentions (Ex. D); Mahon Rebuttal Report ¶¶ 111–16 (Dkt. No. 333-38). It underscores Mahon's deposition testimony that he cited to the '683 Provisional to show reduction to practice. Mahon Dep. at 198:7–10 (Ex. E). But it omits the portion when he testified that he is "relying on the testimony of Dr. Ghosh as cited previously towards the development of that technology and the submission of the provisional application." *Id.* at 199:10–18.

Huawei has provided sufficient evidence that the Motorola Draft R1-050245 was adequately reduced to practice and constitutes prior art.

2. Inequitable Conduct

In response to Samsung's motion, Huawei acknowledges that "the record facts do not support a pleading of inequitable conduct defense with the required particularity." It states that it will not be proceeding with this defense on the '105 patent. Accordingly, Samsung is entitled to judgment that the '105 patent is not invalid based on its inequitable conduct.

VI. SAMSUNG'S MOTION TO PARTIALLY EXCLUDE HUAWEI'S EXPERTS

Samsung moves to partially exclude the reports and testimony of Jorge Padilla, Michael J. Lasinki, and Charles Jackson, on the grounds that they use unreliable methodologies and offer opinions beyond their qualifications. Samsung's Mot. to Exclude (Dkt. No. 335[redacted]; Dkt.

No. 331-2[under seal]). Samsung also moves to strike certain rebuttal opinions offered by Jacques deLisle and Zhi Ding because they offer improper expert rebuttal testimony under Federal Rule of Civil Procedure 26(a)(2)(D)(ii). *Id.*

A. Whether Portions of Lasinski’s Report Are Unreliable

1. Exclusion of [REDACTED] Agreement from Comparable License Analysis

Samsung argues that Lasinski’s opinions are unreliable because he unjustifiably excludes [REDACTED]” (Stake Decl. ¶ 20, *id.*, Ex. 19; Dkt. No. 331-37[under seal])(“[REDACTED] Agreement”) from his comparable license analysis. Mot. at 5.

The parties do not dispute that the [REDACTED] Agreement does not explicitly address rights to non-SEPs. It defines Licensed Essential Patents as “any and all Essential Patents” that a party owns or controls. Ex. 19, § 1.1. [REDACTED] acquires rights to Huawei’s Licensed Essential Patents in Section 2.1 and Huawei acquired rights to [REDACTED] Licensed Essential Patents in Section 3.1. *Id.*, §§ 2.1, 3.1.1 Section 3.4 entitled “No Other Rights; Complete License” provides that “All rights not expressly granted by [REDACTED] hereunder are reserved by [REDACTED]” and Section 2.4 contains a corresponding provision for Huawei. *Id.*, §§ 2.4, 3.4. The agreement also contains a merger clause, Section 12.1 entitled “Entire Agreement,” which provides that the agreement “sets forth the entire understanding of the Parties with respect to the subject matter hereof, and replaces any prior oral or written communications, discussions or agreements between them with respect to such subject matter.” *Id.*, § 12.1. Section 12.4, entitled “Amendment and Waiver” provides that the agreement “cannot be modified, terminated or amended in any respect orally or by conduct of the Parties. . . .” *Id.*, § 12.4. The agreement also contains a choice of law provision, stating that the agreement is to be governed by New York law. *Id.* at § 11.1.

Despite the undisputed fact that the face of the [REDACTED] Agreement is limited to the parties’ SEP portfolios, Lasinski elected not to include it (along with other agreements) in his comparable license analysis. He explained that he chose not to include the [REDACTED] Agreement because, “in addition to obtaining cash consideration and a cross-license to [REDACTED]

1 [REDACTED] ... I understand that Huawei believed it would achieve – as it has – general
 2 patent peace from [REDACTED]
 3 [REDACTED]
 4 commitment.” Lasinski Report ¶ 28 (Stake Decl. ¶ 2, *id.*, Ex. 1; Dkt. No. 331-6[under seal]). He
 5 noted that “[t]he inclusion of even modest value attributable to patent peace in the analysis of this
 6 agreement would result in a one-way effective rate received by Huawei for its 4G SEPs that is
 7 significantly higher when compared to the other indicators.” *Id.* And that it was therefore
 8 inappropriate to include the [REDACTED] Agreement in his analysis of the FRAND dispute in this
 9 case. *Id.*

10 Samsung challenges the reliability of Lasinski’s opinions since the purported basis for
 11 excluding the [REDACTED] Agreement from his analysis is not included anywhere within the four
 12 corners of the agreement. Even Lasinski acknowledged that the expectation of patent peace is not
 13 included within the four corners of the agreement. Lasinski Dep. at 201:2–13 (Stake Decl., Ex. 7).
 14 According to Samsung, because the terms of the agreement are unambiguous and the contract
 15 contains a merger clause, New York law forbids courts from considering extrinsic evidence. *See*
 16 *Schron v. Troutman Sanders LLP*, 20 N.Y.3d 430, 436, 986 N.E.2d 430 (2013) (“Parol evidence—
 17 evidence outside the four corners of the document—is admissible only if a court finds an
 18 ambiguity in the contract. As a general rule, extrinsic evidence is inadmissible to alter or add a
 19 provision to a written agreement.”). It therefore concludes that Lasinski’s opinions are unreliable
 20 and should be stricken.

21 Huawei points out that Samsung does not challenge Lasinski’s opinion that the agreement
 22 would be incomparable if it did include patent peace; rather, it criticizes Lasinski’s basis for
 23 asserting the agreement included an expectation of patent peace. But Huawei provides evidence
 24 supporting the reliability of Lasinski’s conclusion that the [REDACTED] relationship included
 25 general “patent peace” in addition to the SEP licensing component. *See* Opp’n at 5 (citing
 26 deposition and other testimony of Huawei’s lead negotiator Mr. Xuxin Cheng, deposition
 27 testimony of Ms. Nanfen Yu, one of Huawei’s 30(b)(6) witnesses, and the fact that [REDACTED] has not
 28 litigated its non-SEPs against Huawei in light of [REDACTED])

1 [REDACTED]).³⁴ Huawei also underscores that Lasinski's reliance on this sort of
 2 information is within the scope of what other qualified experts typically consider under these
 3 circumstances. It specifically cites the testimony of Samsung's own licensing witnesses that many
 4 factors, including the relationship between the parties, may influence the ultimate decision of what
 5 constitutes FRAND for SEPs in any given case, even though those factors may not be apparent on
 6 the face of an agreement. Chang Dep. at 169–170 (Peterson Decl., Ex. 3; Dkt. No. 347-14[under
 7 seal]); Hong Dep. at 83–85, 167–170 (Peterson Decl., Ex. 4; Dkt. No. 347-14[under seal]).

8 In analyzing the propriety of expert witness testimony and reports, district courts are to act
 9 as “gatekeeper[s], not fact finder[s].” *Sandoval-Mendoza*, 472 F.3d at 655. “[A]n expert may be
 10 allowed to state an opinion on the actual matter in controversy where the opinion clearly identifies
 11 what is *assumed* versus what is opinion.” *Biotechnology Value Fund, L.P. v. Celera Corp.*, No. C
 12 13-03248 WHA, 2015 WL 138168, at *3 (N.D. Cal. Jan. 9, 2015). Samsung is not challenging
 13 Lasinski's opinions because they are based on an unreliable methodology; rather, it contends that
 14 his analysis is unreliable because it includes a faulty assumption. “Shaky but admissible evidence
 15 is to be attacked by cross examination, contrary evidence, and attention to the burden of proof, not
 16 exclusion.” *Primiano v. Cook*, 598 F.3d 558, 564 (9th Cir. 2010).

17 Lasinski explained the reasons for excluding the [REDACTED], as well as other
 18 agreements, from his analysis of a comparable licensing rate. And Huawei has provided
 19 substantial evidence supporting the reasonableness of Lasinski's assumption. I see no basis to
 20 strike any portion of Lasinski's report on this ground; Samsung can attack this assumption through
 21 cross-examination. *See, e.g., Interwoven, Inc. v. Vertical Computer Sys.*, No. CV 10-04645 RS,
 22 2013 WL 3786633, at *11 (N.D. Cal. July 18, 2013) (“Any concern as to the degree of
 23 comparability between an existing and hypothetical license may be addressed through cross-
 24 examination.”).

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 27 ³⁴ The parties bicker over the inferences to be drawn from Ms. Yu's testimony. *See* Opp'n at 5;
 28 Reply at 4. Samsung insists that Ms. Yu admitted that the agreement omits any reference to patent
 nonessential patents.” Yu Dep. at 91:25–92:5 (Stake Decl., Ex. 20). But the disagreement is
 irrelevant to whether portions of Lasinski's opinions should be stricken.

2. Portfolio Strength Indicators

Samsung also challenges Lasinski's opinions assessing the strength of the parties' portfolios, calculating appropriate FRAND rates (and ultimately determining whether the parties' offers were FRAND) because the two indicators he used—the number of “Global Deemed SEP Families” and “the number of submissions made by each SEP holder to 3GPP that were adopted into the standard,” which Lasinski labels “Approved Contributions.” Lasinski Report ¶¶ 21, 23; *see also id.* ¶¶ 82–92; *id.*, Ex. D.

a. Approved Contributions

Samsung attacks Lasinski use of this indicator because (1) he does not offer empirical or quantitative analyses linking Approved Contributions to the economic value of a company's SEP portfolio, (2) it is inappropriate (and redundant) to consider this sort of “proxy” data when actual data on the underlying patents is available via Jackson's Essentiality Database, (3) it is self-serving because Huawei is an active participant in the standard setting process, and (4) Huawei's own expert, Dr. Padilla, testified that “we don't know how strong the correlation is” between Approved Contributions and portfolio value. Padilla Dep. at 35:1–36:13.

Huawei counters with evidence that use of the Approved Contributions indicator is reliable. It cites academic literature and empirical analysis to support its contention that there is “a strong logical and intuitive connection between the number of a firm's technical contributions approved for incorporation into a standard and its number of SEPs[.]” Opp'n at 18 (citing Exs. 17, 18, and 19).³⁵ It also underscores the generally accepted practice that many industry firms—including Samsung—have used Approved Contributions to assess portfolio strength in licensing negotiations. Lasinski Report ¶¶ 89–90.

Samsung's arguments are unconvincing. Lasinski accounts for expired patents and uses a weighted calculation to combine deemed essential patent counts with Approved Contributions, so a firm with a robust SEP portfolio but no contributions would still be assigned a significant patent value. *See* Opp'n at 19–20. Further, the use of the indicator is not duplicative of the database because the deemed essential patents are extrapolations given the number of patents involved, and

³⁵ But Samsung responds that Lasinski did not cite these studies in his report.

the indicator simply provides another factor to consider in analyzing the portfolio strength, which yields more reliable results. And Huawei responds with a fuller recitation of Padilla’s deposition testimony:

Q. And can SEP contributions be used as a proxy for value of a patent portfolio?

A. I think as a profession, as economists, we are struggling to understand or to develop good proxies for value. We have over the years developed some measures, forward citations with – this case is one of them. There is some unsatisfaction about the usefulness of forward citations or patent counting and so we are all looking for different ways in which we could proximate the value. Contributions is one of the notions that has been put forward, and, you know, it has has [sic] its pros and its cons and its problems as well.

And people are trying to come with new ideas as to how to proxy value, because it’s a difficult exercise, and so, you know, I think that my view on contributions is set out in my report, is just one additional proxy that you may want to consider. And my view at this stage is that since there is no perfect proxy, all of these are useful and potentially informative, but all of them should be taken with a pinch of salt.

Padilla Dep. at 34:4–23 (Peterson Decl., Ex. 9; Dkt. No. 347-13[redacted], Dkt. No. 347-14[under seal]). In his Rebuttal Expert Report, he explains that “in certain cases contributions may not be directly tied to SEPs,” but “contribution counting has been considered by several authors and companies to be a useful tool to assess the relative strength of patent portfolios—particular as between companies that are active in the SSO—because companies typically file patents based on inventions related to their contributions and as such, it may be closely tied to the value of the portfolio.” 5/25/18 Padilla Report ¶ 4.2(c) (Stake Decl., Ex. 3; Dkt. No. 331-10[under seal]); *see also* ¶ 4.5 (“[R]esearch has shown that several of these different approaches can be used simultaneously and in combination to more effectively measure patent value. I understand Mr. Lasinski has done so in his opening report by combining the essentiality study of Dr. Jackson with the contributions data.”)(footnote omitted).

Samsung cites *TCL v. Ericsson* to support its view that Lasinski’s reliance on the Approved Contributions indicator is unreliable. In *TCL*, the court noted “two major flaws with contribution counting”—“the absence of any evidence that it corresponds to actual intellectual property rights, and its inability to account for transferred or expired patents.” 2017 WL 6611635, at *41 (C.D. Cal. Dec. 21, 2017). But Huawei underscores that Lasinski addressed each of these

1 “flaws” in his report: his blended index produces results consistent with the parties’ historical
2 license agreements, Lasinski Report ¶¶ 88–91, the effect of transfers are accounted for in
3 Jackson’s database, and Lasinski explicitly accounts for expirations, *id.* ¶ 91 n.213.

4 Samsung has not established that Lasinski’s use of the Approved Contributions indicator is
5 so unreliable that his report should be excluded. He should have cited the studies cited by Padilla
6 in his Rebuttal Report, ¶ 4.5 n.22 and Huawei in opposition, Opp’n at 18–19, but this oversight,
7 and the absence of a published, peer-reviewed study supporting Lasinski’s specific approach do
8 not dictate that his findings are unreliable.

9 **b. “Global Deemed SEPs”**

10 The second portfolio strength indicator relied upon by Mr. Lasinski is the “number of SEP
11 families with at least one issued member in the [United States], Europe, and China deemed to be
12 actually essential in a recent patent census and essentiality study conducted by Dr. Charles
13 Jackson.” Lasinski Report ¶ 21. Samsung attacks this litigation-motivated indicator largely on
14 grounds that it is “obviously biased... .” Mot. at 20.

15 But Lasinski explained that additional information could be gleaned by looking at the
16 number of patent families in the portfolio with active members in the United States, Europe, and
17 China because most of a portfolio’s value is driven by a relatively small number of inventions and
18 one way to identify the most valuable inventions is to ascertain the ones for which the inventor has
19 sought patent protection in multiple jurisdictions. Lasinski Report ¶ 86. Huawei points out that
20 Samsung’s own expert, Dr. Leonard, recognizes these points. *See* Leonard Report ¶188 (noting
21 that “[t]he top 10 percent of patents ... make up approximately 65 percent of total value” and
22 “[t]he next 10 percent of patents ... make up approximately 14.6 percent of the value”); *id.* ¶ 180
23 (“Large, multinational companies have a strong incentive to file for patents in multiple
24 jurisdictions, particularly in the US, given the strong intellectual property protection and large
25 market share.”); *id.* ¶ 180 n.233 (“For example, it has been found that patents applied in both EP
26 and USPTO or at the USPTO alone are more valuable than those applied in EP alone.”); *id.* ¶ 180
27 (“Additionally, filing patents in multiple jurisdictions involves additional costs and risk of
28 rejections; it therefore makes economic sense for the patent owner to apply in multiple

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certain portions of the reports of Lasinski and Padilla because they reference the meaning of a “FRAND” commitment, and provide a subjective analysis of whether each party has complied with its FRAND obligations. Mot. at 8–9; *see* Lasinski Report ¶¶ 68–76 (Stake Decl., Ex. 1; Dkt. No. 331-6[under seal]); Padilla Report ¶¶ 1.13, 3.20–3.38, 6.8 (Stake Decl., Ex. 2; Dkt. No. 331-8[under seal]). But Huawei points out that Lasinski merely states his general understanding of the terms “reasonable” and “non-discriminatory,” Lasinski Report ¶¶ 69–75, and it contends that Lasinski’s understanding of the meaning of the terms aligns with the understanding of Samsung’s own experts. *Compare* Lasinski Report ¶¶ 70, 75, *with* Leonard Report ¶ 30 and ¶ 7.³⁷ Moreover, Lasinski explains the basis for his understanding of the terms “reasonableness” and “non-discriminatory,” including references to court opinions, policymakers, and academics. Lasinski Report ¶¶ 68–72; *id.* ¶¶ 75–76.

Samsung also takes issue with portions of Lasinski’s and Padilla’s reports that recite the parties’ negotiation history. Mot. at 9. Both experts admitted that they had no personal knowledge of the history, but based their opinions on information relayed to them by others. Huawei counters that the details are largely undisputed, and Samsung’s own experts likewise include similar chronologies in their reports. It also acknowledges that Dr. Padilla’s report includes his conclusion that Samsung’s conduct is consistent with patent hold-out and with it being an unwilling licensee and licensor, whereas Huawei’s conduct is not consistent with patent hold-up (as Samsung’s experts claim), and is consistent with it being a willing licensor and licensee. Padilla Report ¶¶ 6.9–6.16.

The Federal Rules make clear that “[a]n opinion is not objectionable just because it embraces an ultimate issue.” Fed. R. Evid. 704(a). “That said, an expert witness cannot give an opinion as to her *legal conclusion*, i.e., an opinion on an ultimate issue of law. Similarly, instructing the jury as to the applicable law is the distinct and exclusive province of the court.” *Nationwide Transp. Fin. v. Cass Info. Sys., Inc.*, 523 F.3d 1051, 1058 (9th Cir. 2008) (quoting

³⁷ It further contends that Samsung’s French law expert admits that French law does not define these terms, but the cited testimony does not reference the terms at all. Samsung pointed out this omission in reply, but did not offer affirmative evidence that French law does in fact define these terms.

another source). “It is well accepted that an expert witness may always testify to facts and opinions that, if found, would allow the trier of fact to reach its own conclusion on an ultimate issue of fact.” *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 4008822, at *12 (W.D. Wash. Aug. 5, 2013).

In *Microsoft*, Judge Robart noted that “[i]t is a more nuanced question whether the expert is permitted to directly express an opinion on that ultimate issue—for example, ... as is relevant here, whether the defendant acted in ‘good faith.’” *Id.* “The touchstone of this inquiry is whether the expert’s testimony on an ultimate issue of fact will be helpful to the jury.” *Id.* “Where the jury is in as good a position as the expert to draw conclusions from the evidence, and is capable of drawing its own inferences, the expert’s ultimate issue testimony is not helpful and should be excluded.” *Id.* “On the other hand, in a more complicated case or a case dealing with a concept less familiar to ordinary jurors, expert testimony on an ultimate issue may be useful for ‘guiding the trier of fact through a complicated morass of obscure terms and concepts.’” *Id.*

Judge Robart concluded that certain statements pertaining to how a patent holder fulfills its FRAND obligation constituted impermissible expert testimony because they were “paradigm legal conclusions[.]” *Id.* He found that the court would inform the jury through its jury instructions as to the rights and obligations of the parties under their RAND commitments, and “expert testimony leaving an impression on the fact-finder concerning the duties and obligations pursuant to the RAND commitment is impermissible.” *Id.* at *14. But he did not strike certain statements reciting factual background and “the testimony of an expert in the SEP industry about whether such offer letters were in fact sent in good faith and about Microsoft’s response to those letters[.]” *Id.* at *17. He noted that “[t]his is a complicated case and the jury will be asked to hear, among other things, evidence regarding offer letters of patent portfolios, industry royalty rates and ranges determined by analysis of those patent portfolios, and the legal framework surrounding RAND licensing both domestic and abroad.” *Id.* at *19. And he determined that Holleman’s opinions on Motorola’s good faith would be helpful to the jury. *Id.*

The challenged portions of Dr. Padilla’s report provide factual context and relay Padilla’s conclusion that Huawei has acted as a willing licensor and Samsung has not. *See* Padilla Report

¶¶ 6.9–6.16. As an initial matter, the factual background provides necessary context to the challenged conclusions. Samsung has not challenged the accuracy of those statements, only the propriety of the expert witnesses opining on matters for which they lack personal knowledge. But Huawei has indicated that it does not intend to substitute expert testimony for that of fact witnesses. I see no reason to strike the factual background paragraphs from the expert reports. If Huawei improperly attempts to introduce this testimony through experts rather than fact witnesses at trial, I will entertain the appropriate objection at that time.

As for Padilla’s conclusion, *see* 6.16, although phrased in different terms, it essentially asserts that Huawei has acted in good faith, whereas Samsung has not. Samsung distinguishes this opinion from the “good faith” opinion that Judge Robart found admissible in *Microsoft* by highlighting that Padilla’s opinion is based on “his understanding of each party’s negotiation conduct,” as opposed to whether the terms of an offer were made in good faith. I do not think it is necessary to so narrowly define the scope of admissible “good faith” expert testimony. Padilla’s opinions do not explicitly state that one party’s actions were “fully consistent with its [F]RAND obligations...” *Microsoft*, 2013 WL 4008822, at *15. As in *Microsoft*, Padilla’s opinions will prove helpful to the jury in determining the ultimate issue of whether either party breached its FRAND obligations.

C. Whether Padilla Improperly Bolsters Lasinski

Samsung next challenges portions of Padilla’s Rebuttal Expert Report that it contends are intended to bolster Lasinski’s report. Mot. at 10; *see* Padilla Rebuttal Report, ¶¶ 2.4, 2.8, 3.9, 4.5 (Stake Decl., Ex. 3).³⁸ Huawei argues that Padilla is not vouching for Lasinski, “but rather

³⁸ Samsung challenges the following paragraphs: Ex. 3, ¶ 2.4. (“In contrast, Mr. Lasinski’s first report is much more in line with the conception of a comparable license analysis that I described in my first report”); *id.* at ¶ 2.8 (“Lastly, in my opinion, using more than one approach, where possible, is likely to lead to more reliable results. This is what Mr. Lasinski has done in his opening report by combining the technical essentiality study of Dr. Jackson with contributions data”); *id.* at ¶ 3.9 (“By contrast, the comparable license analysis conducted in Mr. Lasinski’s first report is much more in line with the conception of a comparable license analysis that I described in my first report because he has discussed comparability of the comparable and focal agreement along several criteria, including date of the agreement, the scope of the licensed portfolio, and the nature of the licensee’s products. He has considered Huawei’s agreements with Ericsson, Nokia, InterDigital Apple, NTT DoCoMo and Qualcomm as well as Samsung’s agreements with Ericsson, Nokia, InterDigital, NEC and Qualcomm, has assessed in detail which of those

bringing to bear his economic expertise on Mr. Lasinski's methodologies." Opp'n at 11.

Huawei provides no legal support that such opinions are admissible. Huawei cannot legitimately claim that the challenged paragraphs do not qualify as vouching. *See, e.g.*, 3.9 ("Therefore [Lasinski's] analysis is better designed to ensure a FRAND rate is derived for Huawei and Samsung's SEP portfolios"). Courts have stricken the testimony of expert witnesses intended to bolster the testimony of another expert. *E.g., K&N Eng'g, Inc. v. Spectre Performance*, 2011 WL 13131157, at *10 (C.D. Cal. May 12, 2011) ("[A] testifying expert can use facts, data, and conclusions of other experts to offer an opinion within the testifying expert's domain of expertise, but the testifying expert cannot vouch for the truth of the other expert's conclusion."); *Creach v. Spokane Cty.*, No. CV-11-432-RMP, 2013 WL 12177099, at *3 (E.D. Wash. May 2, 2013) (noting that an expert may not provide testimony that is "needlessly cumulative or simply bolsters [another witness's] testimony..."). Because it would be unhelpful, or even confusing, for the jury to hear the testimony of Padilla, an economist, supporting the methodology used by Lasinski, an accountant, those paragraphs will be struck.

D. Whether Jackson's Essentiality Database is Unreliable

Both parties acknowledge that not all patents that are declared essential are actually essential to the particular standard. To determine which patents are actually essential, a qualified technical expert must examine the declared essential patent and compare it to the relevant standard. To aid its case, Huawei tasked Dr. Charles Jackson with providing "oversight and assistance" in the construction of a database of allegedly every potentially essential 3G or 4G patent worldwide. To this end, he produced an "Essentiality Analysis Protocol[.]" which outlines the requisite steps to determine the actual essentiality of declared essential patents. Jackson

agreements are comparable given the parties, circumstances, and structure of the agreements, and has unpacked those comparable agreements to inform his opinion as to the FRAND rate. As such, Mr. Lasinski appropriately used information from more than one license to guide and check his analysis. Therefore his analysis is better designed to ensure a FRAND rate is derived for Huawei and Samsung's SEP portfolios"); *id.* at ¶ 4.5 ("Moreover, research has shown that several of these different approaches can be used simultaneously and in combination to more effectively measure patent value. I understand Mr. Lasinski has done so in his opening report by combining the essentiality study of Dr. Jackson with the contributions data").

Report, Appendix C (Stake Decl., Ex. 7). Dr. Jackson and Concur IP, the team in India tasked with working under him, started with a database of over 220,000 patents declared essential, organized them into patent families, and reviewed them for essentiality using a two-step process that Dr. Jackson refers to as “census” and “deeming.” Jackson Report, Section 5. The team identified 12,787 actually essential patents. Jackson Report, Table 10. But Samsung contends that he failed to adequately oversee the development of the database in this case because the bulk of the work was done by Concur IP without Dr. Jackson’s direct involvement, and much of the data was extracted from the work of Dr. Apostolos Kakaes in unrelated litigation involving TCL and Ericsson. Neither attack provides a sound ground for striking Jackson’s opinions.

As an initial matter, the database is not an “opinion,” it is data from which Dr. Jackson forms his opinions.³⁹ The Federal Rules explicitly allow an expert to “base an opinion on facts or data in the case that the expert has been made aware of or personally observed.” Fed. R. Evid. 703; *see also Southland Sod Farms v. Stover Seed Co.*, 108 F.3d 1134, 1142 (9th Cir. 1997) (“The fact that Engelke’s opinions are based on data collected by others is immaterial; Federal Rule of Evidence 703 expressly allows such opinion testimony.”). Dr. Jackson explained in detail the steps the team took to create the database. Samsung questions the reliability of the database on the grounds that Dr. Jackson contributed to an essentiality decision “in the ballpark of 100” and “spot checked ... in the neighborhood of 20” out of the 158,574 decisions that were made under his purported supervision. Jackson Report 6; *see also* Jackson Dep. at 157:15–22, 160:24–161:4 (Stake Decl., Ex. 11). But it does not appear to challenge the qualifications of the Concur IP team, or the methodology that they followed in developing the database. Rather, it attacks the “minimal quality control” and the undisputed fact that some of the data came from the database developed

³⁹ Samsung offers an inapposite hypothetical to “demonstrate[] the absurdity of Huawei’s position[:] [s]uppose an associate working for Huawei’s counsel were tasked with going through the Concur IP database and marking all of Huawei’s patents ‘essential while demining all other patents ‘non-essential.’” Reply at 9 n.7. Under this scenario, Huawei’s accounting expert would then take this database and “value the patents of anyone other than Huawei at zero, highly distorting his ‘comparable license’ and ‘top-down’ approaches in Huawei’s favor.” *Id.* But under this hypothetical, Samsung would have ample grounds for challenging the methodology of the associate in generating the data underlying Lasinski’s opinions. Here, Samsung is not actually challenging the methodology of any of the individuals involved in developing the database.

by Concur IP under the direction of Dr. Kakaes in *TCL Commc'n Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson*, No. CV 15-2370 JVS(DFMX).

In *TCL*, Judge Selna was “not persuaded that the individuals on the Concur IP team lacked the qualifications to perform this work.” 2017 WL 6611635, at *17 (C.D. Cal. Dec. 21, 2017). Samsung cites to an earlier decision in *TCL*, in which Judge Selna granted Ericsson permission to depose Concur IP team leaders, even though they would not be testifying at trial, in part because “neither of the testifying experts could fully explain how the teams in India came to their conclusions in the Census and Industry Essentiality Analysis.” 2016 WL 6662727, at *4–5 (C.D. Cal. July 7, 2016). But he explicitly opted not to strike portions of the reports nor to preclude *TCL* from offering certain testimony “to buttress the reliability of the factual predicates” of the reports. *See id.* at *5.

As Huawei highlights, Judge Selna rejected several challenges to the methodology and ultimately allowed *TCL*’s experts to testify based on the database. 2017 WL 6611635, at *18 (C.D. Cal. Dec. 21, 2017) (“Ultimately the Court finds that the flaws are not enough to justify rejecting *TCL*’s experts’ calculation of the total number of SEPs entirely.”). Because Samsung does not offer legitimate grounds for attacking the reliability of the database, its motion to strike the Jackson Report is DENIED.⁴⁰ Its challenges go to the weight to be given to Jackson’s opinions, not their admissibility. Samsung can attack his testimony on cross-examination.

E. Objections to Rebuttal Reports

1. Dr. deLisle’s “Rebuttal” Report Related to Chinese Legal System

Under Federal Rule of Civil Procedure 26, a party must disclose expert testimony “if the evidence is intended solely to contradict or rebut evidence on the same subject matter identified by another party under Rule 26(a)(2)(B) or (C), within 30 days after the other party’s disclosure. Fed. R. Civ. P. 26(a)(2)(D)(ii). “Rebuttal testimony cannot be used to advance new arguments or new

⁴⁰ In Reply, Samsung focuses more on its contention that Jackson is merely serving as a conduit to introduce the opinions of Dr. Kakaes. *See Reply* at 10. But, regardless of the quantity of Kakaes’s work used in compiling the database, Jackson’s opinions are clearly his own. As Huawei points out, Samsung could have sought to depose Kakaes or members of the Concur IP team, but it did not.

evidence.” *Wadler v. Bio-Rad Labs., Inc.*, No. 15-CV-02356-JCS, 2016 WL 6070530, at *3 (N.D. Cal. Oct. 17, 2016) (quoting another source). “The test of whether an expert’s opinion constitutes rebuttal or a ‘new’ opinion, however, is not ‘whether a rebuttal expert employs new testing or methodologies’ but instead, whether ‘a rebuttal attempts to put forward new theories outside the scope of the report it claims to rebut.’” *Id.*

Huawei’s “rebuttal” expert Jacque deLisle’s opinions relate to “evaluations of Chinese court proceedings and Chinese law[.]” deLisle Dep. at 70:14–15 (Stake Decl., Ex. 16; Dkt. No. 335-17), which Samsung claims do not respond to any of its experts’ opinions or arguments. Mot. at 21; *see* deLisle Rebuttal Report (Stake Decl. ISO Samsung’s Mot. to Partially Exclude, Ex. 15; Dkt. No. 335-16). But Huawei counters that Dr. deLisle’s report directly responds to claims by Samsung’s experts that Huawei’s pursuit of Chinese injunctions was improper in violation of its FRAND obligations and U.S. antitrust law. Opp’n at 24; *see* Leonard Report § VI (citing Huawei’s Chinese injunction actions and “conclud[ing] that Huawei’s threat of an injunction in China is likely to lead to hold-up.”); *id.* ¶¶ 190–193 (explaining why “an injunction in China is likely to hold-up Samsung worldwide, forcing Samsung’ to pay above-FRAND royalty rates for Huawei’s SEP portfolio while accepting less-than-proportional rates for its own portfolio”) (capitalizations omitted).

“The proper function of rebuttal evidence is to contradict, impeach or defuse the impact of the evidence offered by an adverse party.” *Matthew Enter., Inc. v. Chrysler Grp. LLC*, No. 13-CV-04236-BLF, 2016 WL 4272430, at *1 (N.D. Cal. Aug. 15, 2016) (quoting another source). Dr. deLisle’s report does not directly “contradict” Leonard’s opinions, but it does provide important context intended to “defuse the impact” of a critical inference drawn from Leonard’s report—that Huawei improperly sought injunctive relief in China to “hold-up Samsung for above-FRAND royalties.” Leonard Report ¶ 190. Moreover, Huawei notes that the parties agreed that Samsung would have the opportunity to submit a supplemental report responding to Dr. deLisle, *see* Email Exchange re: Improper Rebuttal (Peterson Decl., Ex. 13; Dkt. No. 347-14 at 153–54[under seal]), but Samsung elected not to, so it cannot claim prejudice. Opp’n at 25. On this point, Samsung counters that it reserved its rights to object and “could not reasonably submit a

report responding to Dr. deLisle within one week of being surprised by his report.”

Samsung’s motion is GRANTED IN PART.⁴¹ Huawei may use portions of deLisle’s opinions properly intended to “diffuse the impact” of Samsung’s experts’ opinions that seeking injunctions was improper, but it may not introduce his opinions generally related to the integrity of the Chinese legal system.

2. Dr. Ding’s Rebuttal Report

Samsung moves to strike paragraphs 115, 127–143, and 150 of Dr. Ding’s Rebuttal Expert Report because they do not directly respond to any portion of Dr. Davies’ opening report. Mot. at 21. Huawei offered the objected to portions of the rebuttal report of Dr. Zhi Ding because they were intended to rebut the testimony and opinions of Samsung’s expert Dr. Leonard, but since Dr. Leonard did not rely on the Unwired Planet patents in his assessment, Huawei agrees that it will not present Dr. Ding’s testimony on the subject so long as Dr. Leonard does not introduce the subject. Samsung does not offer further representations in reply, only acknowledging Huawei’s concession. Reply at 3. Since Huawei offered no argument against striking these paragraphs from Ding’s Report, Samsung’s motion is GRANTED.

VII. SAMSUNG’S MOTION TO STRIKE PORTIONS OF EXPERT REPORTS

Samsung moves to strike portions of Huawei’s expert reports because they were not disclosed in accordance with the rules governing pleading and contentions. Mot. to Strike (Dkt. No. 337 [redacted]; Dkt. No. 334-2 [under seal]).

A. Inequitable Conduct Defense for the ’105 Patent

As discussed above, Huawei is no longer pursuing this defense, so I need not address striking these portions of its experts’ reports.

B. Huawei’s Undisclosed Invalidity Contentions for the ’825 Patent

Huawei’s First Supplemental Invalidity Contentions, served on September 22, 2017, included assertions that the ’825 Patent was invalid under 35 U.S.C. § 112 because certain terms

⁴¹ Samsung does not request specific paragraphs to be excluded. To the extent that this direction is unclear, the parties may determine via motions in limine precisely which of Dr. deLisle’s opinions are admissible at trial.

lacked written description and lacked enablement. Ex. C. Huawei’s expert, Dr. La Porta, offered several opinions why the ’825 patent is invalid that were not disclosed via contentions, including that the terms: (1) “a signal generator configured to: select a first ID from among the group of IDs,” (2) “a downlink signal processor configured to: after transmitting the first uplink signal, wait for a predetermined delay duration without checking a downlink channel,” and (3) “predetermined delay duration,” all lack written description support and/or are not enabled. Ex. D at 173–77. He also opined that the terms “a downlink signal processor configured to: after transmitting the first uplink signal” and “a transceiver configured to: transmit the generated first uplink signal to a NodeB” are indefinite. *Id.* at 184–85.

The patent local rules require a party to disclose any grounds for invalidity that “give[] the other party sufficient notice for it to engage in meaningful discovery and preparation of its case.” *MediaTek*, 2014 WL 690161, at *6. Huawei insists that it has met this threshold requirement for each of the issues identified by Samsung.

1. Claim 4’s “signal generator,” “downlink signal processor,” and “transceiver”

Huawei explains that Samsung’s interpretation of these claim elements did not become clear until its interrogatory response served on March 9, 2018, the last day of fact discovery. Its expert, Dr. La Porta, therefore concluded that “signal generator” and “downlink signal processor” lacked written description, and “downlink signal processor” and “transceiver” are indefinite when considered together in the context of the claim. La Porta Invalidity Report ¶¶ 479–83 (Yang Decl., Ex. 10). It insists that it provided sufficient notice by timely serving its opening expert reports, Samsung never objected during expert discovery, and Samsung has suffered no prejudice, as demonstrated by Dr. Valenti’s rebuttal report which fully addresses Dr. La Porta’s opinions on indefiniteness and Samsung’s opportunity to depose Dr. La Porta about his opinions. Opp’n at 12. It points to *Medimmune, LLC v. PDL Biopharma, INC.*, No. C 08-5590 JF (HRL), 2010 WL 760443 (N.D. Cal. Mar. 4, 2010), for support.

In *Medimmune*, the Hon. Jeremy Fogel denied a motion to strike invalidity contentions based on insufficient disclosures because the contentions were asserted with the requisite

specificity, and “discovery ha[d] proceeded to the point that PDL ha[d] received MedImmune’s extensive expert reports with respect to the subject contentions.” *Id.* at *3 n.3. The difference here is that Huawei did not include these indefiniteness challenges in its invalidity contentions and never sought leave to amend. But it did expound on the theory in Dr. La Porta’s opening report, which is dated April 27, 2018.

Samsung cites to *BioCell Tech. LLC v. Arthro-7*, 2013 WL 12131282 (C.D. Cal. Apr. 16, 2013) to argue that Huawei’s position regarding lack of prejudice “would make it impossible to strike any new argument in an opening expert report, robbing the Patent Local Rules of meaning.” Reply at 4. The *BioCell* court found that “Defendants waived and/or [were] estopped from asserting indefiniteness in light of their Invalidity Contentions and stipulation to claim construction.” *Id.* at *9. The court compared the circumstances to those in *Apple, Inc. v. Samsung Electronics Co.*, No. 11-cv-01846-LHK, 2013 WL 412858 (N.D. Cal. Jan. 29, 2013) and concluded that “Defendants’ present argument is a clear example of ‘unfair surprise.’” *BioCell*, 2013 WL 12131282, at *10. In *Apple*, Judge Koh found that Samsung had not waived its indefiniteness challenge even though it had not selected the term for construction because Samsung had raised the issue in its answer, invalidity contentions, summary judgment briefing, and at trial. 2013 WL 412858, at *6.

These circumstances fall in between *Apple* and *BioCell*. Samsung cannot legitimately claim any “unfair surprise,” but Huawei has not asserted these indefiniteness challenges since the inception of this case. But the reason for that is because the theory is directly driven by Samsung’s interpretation of the claim terms. In this situation, I am “extremely reluctant” to dispose of substantive invalidity attacks based on procedural defects. *See Biogenex Labs., Inc. v. Ventana Med. Sys., Inc.*, No. C 05-860JFPVT, 2006 WL 2228940, at *4 (N.D. Cal. Aug. 3, 2006) (“While it ultimately concludes that BioGenex acted unreasonably with respect to both its shift in infringement position and its failure to respond to relevant discovery requests, the Court is extremely reluctant to dispose of substantive infringement claims based upon procedural defects, particularly given that BioGenex has offered at least articulable reasons for its conduct and that there is no evidence of bad faith.”).

2. Predetermined delay duration

Samsung acknowledges that Huawei identified the term in its invalidity contentions, but argues that “there are two distinct deficiencies in [the] disclosure.” Mot. at 11. First, it contends that Huawei merely identified an indefiniteness challenge, but did not note a specific challenge based on lack of written description, on which its expert specifically opines. Second, it insists that the disclosure is insufficient because it failed to explain why it contends that the term “predetermined delay duration” is indefinite. It also urges that Huawei has waived the argument because it failed to raise it during claim construction briefing.

But Huawei did address the term during claim construction—it argued that its proposed construction, “delay duration provided by base station,” was necessary for the system to work as intended. *See* Huawei’s Responsive Claim Construction Br. at 13 (“The ’825 patent, however, describes a single way of predetermining the delay duration that is necessary in order for the invention to work.”). In the Claim Construction Order, I twice noted Huawei’s argument that this is the only way for the invention to work, but opted not to import the limitation that the delay duration be provided by the base station. *See* Claim Construction Order at 23–24. Huawei did not waive this argument.⁴²

As for Huawei’s challenge based on written description, it argues that “Samsung was indisputably on notice of the written description issue no later than the Court’s claim construction order, if not well before, and cannot credibly claim prejudice.” Opp’n at 11. The patent local rules explicitly provide that a party would have good cause to amend its infringement or invalidity

⁴² In support of its argument, Samsung cites to out-of-district cases for the proposition that a party waives indefiniteness challenges by not raising them in claim construction briefing. *See Edgewell Pers. Care Brands, LLC v. Albaad Massuot Yitzhak, Ltd.*, No. CV 15-1188-RGA, 2017 WL 1900736, at *4 (D. Del. May 9, 2017); *Silver State Intellectual Techs., Inc. v. Garmin Int’l, Inc.*, 32 F. Supp. 3d 1155 (D. Nev. 2014). But neither case stands for the proposition that a challenge must clearly be labeled as one for “indefiniteness.” The *Edgewell* court found that the defendants waived a challenge to “truncated” based on their assertion that it would be unclear where the truncation begins, when they failed to raise the argument in their briefing. 2017 WL 1900736, at *4. But the court also noted, “[e]ven assuming it was not waived, one skilled in the art would understand with reasonable certainty where the truncation begins in light of the figures provided the specification.” *Id.* And the *Silver State* court denied Garmin’s motion to amend its invalidity contentions when it based its challenge on the court’s claim construction and waited two months to amend. 32 F. Supp. 3d at 1166. Neither case is helpful here, where Samsung’s argument is essentially that Huawei did not label its “will not work” argument as an indefiniteness challenge.

contentions after “[a] claim construction by the Court different from that proposed by the party seeking amendment[.]” Patent L.R. 3-6(a). It was Huawei’s duty to amend its contentions, not Samsung’s responsibility to infer Huawei’s arguments based on the Claim Construction Order. But Huawei points to the lack of prejudice to Samsung, as evidenced by Dr. Valenti’s rebuttal report, and urges that the court should decline to strike this substantive argument based on a procedural defect. Opp’n at 11 (citing *Biogenex*, 2006 WL 2228940, at *4). As with the previous issue, I am “extremely reluctant” to dispose of substantive arguments based on procedural defects. *See Biogenex Labs.*, 2006 WL 2228940, at *4.

I also reject Samsung’s contention that Huawei’s disclosure in its invalidity contentions was insufficient because it failed to explain why it contends that the term “predetermined delay duration” is indefinite. As evidenced during claim construction arguments, Samsung understood Huawei’s position that the term is indefinite if the delay duration is not determined by the base station because the patent provides no other mechanism for determining the delay duration.

Samsung’s request to strike paragraphs 478–485, 489, and 499–501 is DENIED.

C. Huawei’s Undisclosed Noninfringing Alternatives, Noninfringement Contentions, and Noninfringement Theories

1. For Samsung Asserted Patents

During fact discovery, Samsung served interrogatory no. 14 asking Huawei to identify noninfringing alternatives to the Samsung patents-in-suit. Ex. E at 30–31. Huawei initially indicated that it would “respond to this interrogatory at an appropriate time.” Its final response asserted that it would “disclose its experts’ opinions in accordance with the expert discovery schedule in this matter,” noted that the functionality of its products constituted a “design-around,” and identified as responsive the entirety of the “deposition testimony of its technical and source code witnesses deposed in this case.”

2. Noninfringing Alternatives

Huawei never supplemented this interrogatory response and did not identify any noninfringing alternatives in its opening reports, but disclosed several in its rebuttal reports. Samsung moves to strike the following portions of Huawei’s expert reports: Mahon Rebuttal

1 Report Regarding Noninfringement of the '105 patent ¶ 11 (last sentence), ¶¶ 149–157 (Ex. J); La
 2 Porta Rebuttal Report Regarding Noninfringement of the '825 patent ¶¶ 35, 265–270 (Ex. K);
 3 Akl Rebuttal Report Regarding Noninfringement of the '350 patent ¶ 20 (last sentence), ¶¶ 263–
 4 66 (Ex. L); Mahon Expert Report Regarding Noninfringement of the '130 patent ¶¶ 10, 137–140
 5 (Ex. M); Fuja Expert Report Regarding Noninfringement of the '726 patent ¶¶ 41, 228–230 (Ex.
 6 N).

7 Huawei aims to justify this apparent failure by contending that the interrogatory request
 8 did not seek the information contained in its experts' reports. Interrogatory no. 14 sought "design-
 9 around or alternative technology or method (design-around) that . . . *can* be used as an alternative
 10 to the claimed subject matter of the asserted(s) of the Samsung Patents-In-Suit." Ex. E at 30
 11 (emphasis added). The portions of the reports listed above that Samsung seeks to strike include
 12 opinions concerning what acceptable alternative technology existed *at the time the 3GPP standard*
 13 *was adopted*. Huawei argues that those alternative technologies *could not* be used as an
 14 alternative at the time Samsung served its interrogatory request because the standard had already
 15 been adopted, after which there is no way to "design around" a patent that embodies mandatory
 16 standards technology. *See* Opp'n at 19 (citing Lasinski Op. Expert Report at 40).

17 Samsung counters that Huawei's "assertion strains credibility." Reply at 4. I agree with
 18 Samsung that the interrogatory was directed towards noninfringing alternatives, but I am not
 19 convinced that Huawei's explanation should be so easily brushed aside. The interrogatory sought
 20 technology that "can" be used as an alternative, and Samsung does not directly dispute Huawei's
 21 contention that once the standard was adopted, no acceptable alternative technology exists. It
 22 does, however, dispute any "temporal limitation" in the interrogatory, and it underscores the
 23 language asking "when the alleged design-around was available for use" as support that the
 24 request sought "any and all design-arounds at any point in time." Reply at 5.

25 But Samsung cannot deny that its interrogatory used "can," not "could" as it claims in its
 26 motion. Huawei insists that a request for "present-day design-arounds to the asserted patents" is
 27 "irrelevant to the issue of whether there were any acceptable alternative technologies at the time of
 28 the adoption of the relevant 3GPP standard," which is the subject of its rebuttal reports. Given the

plain language of the interrogatory, I agree with Huawei. Samsung can legitimately argue that Huawei should have known what it intended by its request, but that does not change the plain language of the request.

Moreover, this case is different than those relied on by Samsung that place the burden of identifying noninfringing alternatives during the accounting period on the accused infringer. None of those cases dealt with a technology that was declared essential to a standard.

Huawei also emphasizes that it consistently took the position that this subject was properly suited for expert, not fact, discovery, and therefore need not have been disclosed in interrogatories. *See Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, 2017 WL 5137401, at *13 (E.D. Tex. Nov. 4, 2017) (“[E]xpert theories need not be disclosed in response to interrogatories.”). To the extent that Samsung disagreed with this contention, it could have moved to compel a further response. Huawei insists that its experts’ reports were directly responsive to Samsung’s experts’ opinions concluding that there were no “viable non-infringing alternative[s]” and criticizing certain alternative technologies available at the time the standard was implemented. *See* Bambos ’130 Opening Infr. Report ¶¶ 975-76 (Yang Decl., Ex. 2) ; Prucnal ’105 Opening Inf. Report ¶¶ 706-07 (Yang Decl., Ex. 14); Valenti ’825 Opening Infr. Report ¶ 926 (Yang Decl., Ex. 9); Bambos ’726 Opening Infr. Report ¶¶ 975, 977 (Yang Decl., Ex. 2); Prucnal ’350 Opening Inf. Report ¶¶ 706, 708 (Yang Decl., Ex. 14). Samsung cannot claim any prejudice since it introduced the issue into its opening expert reports.

3. Noninfringement Theories

Samsung also takes issue with several of Huawei’s noninfringement theories that it contends were not disclosed during discovery:

For the ’105 patent: (1) the Accused Instrumentalities do not use “FT pre-coded symbols” because Physical Uplink Shared Channel (“PUSCH”) symbols purportedly contain control information in addition to data information (see Ex. J at 29-34); (2) the Accused Instrumentalities do not map PUSCH and Physical Uplink Control Channel (“PUCCH”) symbols to two sets of subcarriers such that both sets of subcarriers are available for transformation during the same IFFT operation (id. at 38-46); and (3) the Accused Instrumentalities do not perform the same IFT operation on the PUSCH and PUCCH (id. at 47-50);

For the ’350 patent: (1) performing only the steps in method claim 1 does not result in the determination of “downlink transmit power,” which is based on a new claim

construction theory that the preamble is limiting (*see* Ex. L at 53-59); (2) the claimed “determining a cell-specific ratio” cannot be met by using a lookup table based on Huawei’s proposed construction of “determining” as “calculating” (*id.* at 60-63); (3) the claimed “receiving a cell-specific parameter” is not met by receiving an index value for a lookup table based on Huawei’s proposed construction of “cell-specific parameter” as “a parameter representing an RS boosting value” (*id.* at 63-65); and (4) the Accused Instrumentalities do not use a cell-specific ratio because “[t]he same ‘ratio’ is not used by all user equipment in a cell” and that different manufacturers purportedly use different ratios (*id.* at 69-72).

For the ’130 patent: data is not mapped to “remaining” symbols in the slot when a Sounding Reference Signal (“SRS”) is sent (*see* Ex. M at 40-41).

For the ’726 patent: Samsung has failed to point to evidence of a claims “HARQ processor” (*see* Ex. N at 76 – 81)

Huawei responds to Samsung’s attack by offering that noninfringement contention interrogatory responses are not required in this district, it nonetheless sought to meet and confer with Samsung regarding mutual supplementation of the parties’ noninfringement interrogatories, it provided responses at the same level of detail as Samsung, and certain positions were unforeseeable until Samsung served its opening infringement reports.

Given the uncertainty as to the requisite particularity of the responses and the lack of prejudice, I will not strike these theories on procedural grounds.

4. For Huawei Asserted Patents

Samsung’s Interrogatory No. 35 asked Huawei to describe any “design-around alternatives” to Huawei’s asserted patents.⁴³ Ex. O at 2. Three weeks after the close of discovery, Huawei responded:

there were no alternative proposals that solved the problems solved by Huawei’s inventions. Any alternatives either failed to solve the same problems, or failed to provide an efficient solution like Huawei’s inventions. Due to their superiority as compared to available alternatives, Huawei’s inventions were adopted into the LTE standards.

Ex. P at 22. Huawei did not identify any specific design-around alternatives, but referred to its response to Interrogatory No. 20, which mentions alternatives for the ’613 and ’587 patents. Ex. Q at 18–19, 22–23, 25–26. Samsung argues that Huawei’s opening expert reports identify several previously undisclosed purported noninfringing alternatives for each of Huawei’s patents-in-suit.

⁴³ Unlike Samsung’s Interrogatory No. 4, this request sought “design-around alternatives” that “could have been utilized” in lieu of Huawei’s asserted patents.

But that is not what the reports identify. To the contrary, they opine on why certain technologies could not serve as a feasible alternative to Huawei's patents. *See* Ex. R ¶¶ 537-45 ('239 patent); Ex. S at ¶¶ 481-500 ('892 patent); Ex. T at ¶¶ 296-309 ('587 patent); Ex. U at ¶¶ 279-84 ('613 patent).

Huawei asserts that it could not have known that its responses were inadequate given the parties' agreement, and therefore had no duty to supplement. To the extent that Samsung contends that Huawei's responses were inadequate, it should have moved to compel supplemental responses rather than seeking to strike portions of the expert reports at this stage.

D. Huawei's Omission of Priority Dates for the '587 and '892 patents in its Opening Expert Reports

Huawei's opening expert reports offering opinions on alleged infringement of the '587 and '892 patents failed to mention any priority date for either patent, *see* Ex. S at ii-iii; Ex. T at ii-v, but the rebuttal reports included specific priority dates, *see* Ex. V ¶¶ 62-65; Ex. W ¶¶ 59-77.

Huawei responds that its infringement contentions on October 25, 2016 identified December 3, 2009, the date of the original Chinese application, as the priority date for the '587 patent, and identified April 30, 2007, the date of the original Chinese application, as the priority date for the '892 patent. Given this disclosure, which Samsung does not directly address, I fail to see any basis for concluding that Huawei "needed to include" this evidence in its opening reports, thereby justifying striking its rebuttal expert reports.

E. Huawei's Undisclosed DOE Theory for the '239 patent

Samsung contends that Huawei did not invoke a DOE theory in its infringement contentions served for the '239 patent, and it made no attempt to amend. But Huawei's opening expert report on infringement of the '239 patent includes the opinion that "u+1" is equivalent to the "group number K" from the asserted claims under the DOE. Ex. R at ¶¶ 254, 271, 282, 318, 338, 370. Samsung seeks to strike these opinions.

Huawei argues that the claims "do not require receiving the 'group number k' directly from the network and can cover receiving precursors and calculating the group number." Opp'n at 4. From this premise, it insists that Samsung ([REDACTED])

1 [REDACTED] literally infringes. According to Huawei, Samsung's interrogatory responses on
 2 noninfringement of the '239 patent stated that "Huawei impermissibly redefines the group number
 3 'k' to be 'u + 1' in the standard – but of course 'u + 1' is not the group number." Yang Decl., Ex.
 4 3 at 243.⁴⁴ But it did not disclose Samsung's current theory that "obtaining" cannot include
 5 calculating. This theory was first presented in Dr. Madisetti's rebuttal noninfringement report.
 6 Madisetti '239 NonInf. Report ¶¶ 64–68 (Yang Decl., Ex. 4).⁴⁵ It further contends that Samsung
 7 has not been prejudiced as evidenced by its full response to the DOE theory in Madisetti's rebuttal
 8 report and opportunity to depose Dr. Veeravalli about any statements in his opening report.
 9 Samsung counters that Huawei could have sought leave to amend its infringement contentions to
 10 include its DOE theory if it was "truly ... blindsided by Samsung's noninfringement argument[.]"
 11 and could have brought a motion to strike portions of Madisetti's report if it thought the theory
 12 was not adequately disclosed. Reply at 15.

13 Both sides have failed here. Huawei should have sought leave to amend its infringement
 14 contentions when it realized that it would offer evidence under a DOE theory of infringement. On
 15 the other hand, its initial infringement contentions inform Samsung of the substance of its DOE
 16 argument—that it contends that the group number k equals "u+1[.]" I see no reason to apply an
 17 overly formalistic approach to the rules to strike these portions of Dr. Veeravalli's report, given
 18 that they are not really "new infringement theories" but simply have a "new" label. *See Verinata*
 19 *Health*, 2014 WL 4100638, at *3 ("Given the purpose behind [these] disclosure requirements, a
 20 party may not use an expert report to introduce new infringement theories..."). In determining
 21 whether to strike portions of expert reports for failure to comply with the patent local rules, I
 22 assess whether striking will result in litigation that is more fair, or less. *Apple*, 2012 WL 2499929,
 23 at *1. Samsung was aware of the underlying theory of infringement since Huawei's initial
 24 contentions (although not labeled as "DOE"), including the particular limitation that the group

25
 26 ⁴⁴ Huawei notes (without support) that Samsung served these responses at 11 pm on the last day of
 27 fact discovery, so it "could not have responded with its equivalents argument before discovery
 closed." Opp'n at 5.

28 ⁴⁵ As discussed above, Huawei has moved to exclude these portions of Dr. Madisetti's report
 because they apply overly narrow interpretations of claim terms. *See supra* section IV.E.1.

number k is equal to “u+1” and fully responded to the arguments in Dr. Madisetti’s rebuttal report, so I will not strike these paragraphs.

This brings me to Samsung’s failure, which is not truly at issue in this motion since Huawei has not separately moved to strike any portion of Dr. Madisetti’s report. As Samsung points out, Huawei moved to exclude Dr. Madisetti’s opinions on the “obtaining ... a group number k” limitation based on claim construction arguments, but it did not separately move to strike those opinions based on failure to comply with the local rules. This does not absolve Samsung of the same responsibility to abide by the patent local rules. It should have amended its interrogatory response to include its theory that it does not infringe because “obtaining” cannot include calculating.

VIII. MOTIONS TO SEAL

In conjunction with the briefing on these motions, the parties have asked to seal an inordinate amount of information. This is a court of public record and the parties must have a compelling reason to justify concealing information from the public. This case is proceeding to trial and I expect much of the information the parties currently seek to seal will by necessity – given the information’s centrality to the parties’ arguments – be discussed during trial. I will not seal, or close the courtroom, when information central to the parties’ arguments in this case is being discussed before the jury unless the parties demonstrate the most compelling of reasons and show through persons with direct knowledge why significant harm *would* occur if the information became public.

For current purposes, the parties must re-review each of the documents and pieces of information they believe should remain under seal under the compelling justifications standard. They must then submit one, joint chart identifying by specific docket and sub-docket number (*e.g.*, ECF Dkt. No. 384-2) and then by page/line or paragraph number the specific, narrowly tailored information they seek to seal. For each piece of information to be sealed, the chart shall identify the specific portion of a declaration, by docket number and then page/line or paragraph number, where a person with knowledge has demonstrated compelling reasons for sealing that specific piece of information, including the harm that would be caused if the information were publicly

disclosed. The joint chart shall also identify – again by ECF Dkt. No. and sub-number – docket numbers that can be wholly unsealed because no party currently believes the information should remain under seal.

This joint chart and any supplemental declarations in support, shall be filed within twenty (20) days of the date of this Order.

When deciding what information the parties believe should remain under seal, they should adhere the following guidance:

Percentages of royalties sought or secured in negotiations or resulting licensing agreements may remain under seal at this juncture, if those terms are not otherwise publicly known. This includes references to the identities of third-parties to those agreements, assuming the existence of the agreement itself is not otherwise publicly known.

No other provisions of proposed or secured licensing agreements shall be sealed, unless a person with knowledge explains why specific provisions are so unique to that agreement that disclosure would cause significant harm.

Descriptions of confidential functions of accused products, including references to the contents of source code are sealable, if those functions or portions of source code are not otherwise obvious, expected, or publicly known.

Expert and percipient witness discussions of how the patents function or the alleged prior art are not sealable.

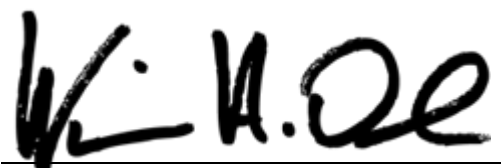
Information disclosed during open court, in particular during the hearing on these pending motions, shall not be sealed. Likewise, information that is not ultimately redacted from this Order shall not be sealed.

CONCLUSION

The motions are resolved in accordance with the forgoing discussion.

IT IS SO ORDERED.

Dated: September 25, 2018



William H. Orrick
United States District Judge